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Needs Assessment As A Process For Change Management: Aligning Organizational Performance And Human Capital Investment With Strategic Planning And Change Creation

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NEEDS ASSESSMENT AS A PROCESS FOR CHANGE MANAGEMENT: ALIGNING ORGANIZATIONAL PERFORMANCE AND HUMAN CAPITAL INVESTMENT WITH STRATEGIC PLANNING AND CHANGE CREATION

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DEDICATION

In the name of God, the most compassionate, the most merciful

I would like to whole-heartedly dedicate this work to a number of important people in my life. To my wife, Nada Alrajhi, for her never-ending love, genuine and committed family partnership, and support throughout my studies and research. To my children, Alhanouf, Nawaf and Mohammad, for being a constant source of love, inspiration, and encouragement. Alhanouf, my oldest child, who experienced all of our difficulties, challenges and successes, you amaze me with your patience, understanding and unbelievable support throughout this journey.

To the most important person in my life, my mother Hossah Alshoaibi, who taught me to never stop pursuing my goals, and believe that anything is achievable; THANK YOU MOTHER FOR YOUR UNWAVERING SUPPORT. To my father, Mohammad, who I miss every day and I wish he could be here with me to see this dissertation completed. His words of motivation and support have always kept me going forward. If he were here, I know he would be proud. Thank you mother and father for your prayers, love, and support. I am here today because of you. To my family and friends in Saudi Arabia, without your love and prayers, this work could not have been accomplished.

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CHAPTER 1: INTRODUCTION

The marketplace is highly competitive and complex, creating an ongoing demand for leaders who can thoughtfully plan and implement appropriate organizational systems to maintain their competitive advantage in the marketplace (Porter & Millar, 1985). The complex process of system and structure design and implementation in business is informed by the Performance Improvement (PI) field. PI uses a systematic means to analyze results and relevant behaviors in organizations. Through consideration of a variety of performance factors, this systems theory-led approach (Johnson, Kast, & Rosenzweig, 1964; Bertalanffy, 1972; Richey, Klein, & Tracey, 2010; Kaufman, Oakley-Browne, Watkins, & Leigh, 2003) enables organizations to effectively accomplish desired objectives (Reiser & Dempsey, 2011). The consideration of how parts of an organization interact with one another gives special attention to the structure and provides a template to managing planned changes that will result in the intended payoffs.

Measuring the impact of particular changes in an organization requires responsive and flexible mechanisms. Effective prioritization that follows the evolving needs of the organization provides important guidance to decision makers on how to best execute changes (Graetz & Smith, 2009). The strategic planning approach examines whether or not organizations have the means to meet objectives intended with the proposed changes. Social responsibility is critical for businesses long-term sustainability (Porter & Kramer, 2006). In order to achieve organizational sustainability, the current needs of an organization must be met, without threatening future endeavors (Porter & Kramer, 2006). From a sustainability perspective, a strategic approach will clarify the societal value organizations provide before initiating any changes. This clarification involves creating an effective strategic plan based on measurable goals that relate to long-term societal value, then allowing the organization to prioritize needs. Organizations are managed by people who

themselves, are complex. The human component brings several critical factors, such as variable performance, behaviors, and attitudes. All of these factors impact organizational success. Determining strategic changes from a top-bottom approach sets the stage for effective tactical and operational planning that aligns human performance competence with organizations' vision and mission (Kaufman, 2009; Peterson & Nielson, 2009; Kaufman & Guerra-Lopez, 2013). Organizations should link operational, tactical, and strategic levels in order to match skills, knowledge, and ability to desired outcomes and achieve meaningful and measurable results (Kaufman & Guerra-Lopez, 2013; Kaufman et al., 2003; Kaufman, 2009; Porter & Millar, 1985). In order for change initiatives to be aligned with organizational strategic, tactical, and operational levels, a holistic needs assessment (NA) must be conducted (Hung & Altschuld, 2013; Kaufman & Guerra-Lopez, 2013; Kaufman et al., 2003; Rodriguez, 1988). Identifying strategic results is vital for realizing long-term goals. Strategic identification of desired results focuses on external clients and societal value that promote organizations to work more efficiently. Organizations that accurately identify strategic results are able to effectively use, produce, and deliver both internally and externally driven goals in order to achieve their long-term visions (Porter & Kramer, 2006; Kaufman & Guerra-Lopez, 2013; Guerra-Lopez & Thomas, 2011). Tactical results should also be addressed and aligned with the strategic level, and focus on short-term results (mission) of output. Output refers to the payoff of what the organization uses and produces inside itself and what is delivers to the external client and society to accomplish the organizational vision.

In the business sector, organizations face critical problems due to the misalignment of internal systems with external environment. Recognizing the internal systems such as processes, operations, employee capabilities, as well as factors in the external environment, such as economic, political issues, marketplace, etc. (Cabrera, Colosi, & Lobdell, 2008), is important for

organizations to have an effective alignment between the internal systems and the external environment. Complexity theory posits that organizations are in an active non-linear system where its parts are constantly changing, and results are not predictable (Lewin, Parker, & Regine, 1998; Burnes, 2004; 2005). Chaos can occur when one change within a system impacts the entire organization in a way where outcomes are unable to be anticipated (Lorenz, 1993; Burnes, 2005; Levy, 2000; 1994). Due to the complexity of internal operations that interact with the external environmental factors (e.g., economy, competition, and other uncontrollable variables), chaos can emerge in any situation within an organization. Managing a business from a systems perspective can potentially make the complexity more manageable, and help improve alignment between inputs, processes, and outputs (Johnson et al., 1964).

System changes in a complex environment are unpredictable. Complexity theory is also a non-linear perspective and specifically speaks to this unpredictability and the crucial role it plays by requiring organizations to constantly set new interventions in order to survive (Burnes, 2005). Organizational behavioral systems can be managed by a set of rules and approaches (Brown & Eisenhardt, 1997; Burnes, 2005; Lewis R. , 1994; Stacey, Griffin, & Shaw, 2000; Styhre, 2002). Complexity theory stems from both systems and chaos theories, which shows the world as much larger than the sum of its components. This theory accounts for how departments at different organizational levels interact with each other to produce a certain outcome based on the system's environment. Therefore, it is essential to understand that all components of an organizational system are constantly and concurrently changing in response to feedback from both within and outside the system. The business entity must be sensitive to feedback, particularly since a change in one part of the system can affect other parts, and ultimately have an impact on the entire organization. If an organization is not attuned with feedback, opportunities can be missed, poor

decisions can be made, and a series of threatening events and consequences can drive the business to chaos and confusion (Dann & Barclay, 2006; Van Tiem, Karve, & Rosenzweig, 2006).

Use of an organized and systemic approach enables an organization to efficiently plan, manage, and control the operations, including human capital, external influences, and internal factors (Van Tiem et al., 2006). A *systematic* approach helps businesses organize, predict, and control their operations and work processes, and minimizes negative behavior caused by complexity and/or chaos factors (Kaufman & Guerra-Lopez, 2013). The *systemic* approach, on the other hand, describes how any approach implemented can impact the organization as a whole, including employee competence and work procedures (Darabi, 2007; Watkins & Leigh, 2009; Guerra-Lopez I. , 2009).

Rummler (2004) identified five key components of organizational performance: the job, performer, response, consequence, and feedback. These components play an important role for the success of the organizational change process. These components can deter change, if they do not align with the individuals' performance and expected organization outcomes (Van Tiem, Moseley, & Dessinger, 2012). Rummler and Brache (1995; 2013) proposed a process where organizations are viewed as a system in order to effectively align departments, processes, and employees to accommodate for when the business environment becomes more complex. This alignment should be accompanied by systematic performance assessment and analysis in order to continually improve performance. This process reveals measurable gaps between desired and current performance based on reliable and valid data, obtained from verifiable sources. Comprehensive data sources are extremely vital for leaders to evaluate the current situation, identify the problem, and determine the right solution. Nutt (2008) found evidence to support the process of data collection based on evidence to be more effective than other processes based on hunch and feelings

for quick solutions, which in some cases organizational needs are not considered and/or investigated. However, it is important to note that not all collected information is considered evidence (Hobbs, 1987). Some organizational leaders rely on individual perspectives, beliefs, values, opinion, and other subjective information to make decisions. Others rely on analyzing hard data, such as annual reports as well as financial, economic, and industry reviews to make decisions and offer recommendation to solve problems (Kolb & Kolb, 2008). Both qualitative and quantitative data are important for organizations to understand what their company needs to be successful and solve problems within the organization. This performance needs assessment (NA) helps identify measurable gaps in important performance metrics or indicators. The analysis phase helps understand the causal factors that contribute toward those gaps (Kaufman & Guerra-Lopez, 2013).

Needs assessment (NA) helps organizations and individuals identify gaps between their current conditions and expected results. Through this process, expected results are placed in priority order based on costs and consequences versus wants, to achieve successful change outcomes through intentional change initiatives. Some organizations do not use structured needs assessment procedures, and focus more on means rather than results. They improve processes and resources, but skip the essential step of defining gaps between their current operations and their desired accomplishment (Harless, 1978; Kaufman, 2014; Kaufman & Guerra-Lopez, 2013; Hung & Altschuld, 2013). Without clarity on the measurable gaps between expectations and results, organizational leaders run the risk of selecting and implementing inappropriate, or even harmful, change initiatives. The goal of measuring gaps and assessing organizational needs is to make sound decisions about how to close those gaps and facilitate *effective* organizational change. This

identification of performance gaps and measurable goals is the crux of any effective change management (CM) process (Van Tiem et al., 2012).

The identification of gaps helps an organization meet stakeholder expectations by adding societal value in a cost-effective, as well as proactive way (Rummler, 2004; Brethower, 2006; Kaufman & Guerra-Lopez, 2013; Kaufman et al, 2003). However, most organizations are reactive to change. This reactive approach forces leaders to shift organizational strategies in order to meet economic changes, marketplace competition, or/and to meet customers' demand (Appelbaum, St-Pierre, & Glavas, 1998; Kaufman, 2006; Kaufman et al., 2003). Once change is required, business leaders face many choices regarding how to incorporate change within the existing organizational structure (Kaufman, 2006). Instead of using past approaches and solutions (Nutt, 2000), leaders often react to changes in the marketplace and other external influences. This risky method of decision-making is often based on antiquated approaches and often leads to failure of new initiatives. The shift from a reactive perspective to a proactive perspective requires an organization to use approaches driven by logical patterns and human capital needs (Kaufman, 2005; Kaufman, 2009; Kaufman & Guerra-Lopez, 2013; Senge, 1990). Therefore, needs assessment is an essential tool in strategic planning to enable effective changes in business and achieve long-term success.

Making decisions using data based on organizational and human needs are critical for organizational success (Watkins & Wedman, 2007; Guerra-Lopez & Thomas, 2011; Van Tiem et al, 2012; Guerra-Lopez & Blake, 2011). For most organizations, this requires a decision audit. This audit gives stakeholders information that will enable them to better understand and prioritize their decisional approach, understand how their decisions could potentially impact business performance, and determine at which organizational level change should be implemented (Blenko, Mankins, & Rogers, 2010). With the many approach options decision makers have, they either

make their decision based on personal judgment, analysis of each decision, or through negotiations among stakeholders to select an agreeable decision to execute. These processes require most decision makers to devote tremendous time and money evaluating alternative decisions (Nutt, 2000).

Problem Statement

It is estimated that 70% of CM initiatives are considered unsuccessful (Kotter, 2008; Beer & Nohria, 2000). Reasons for the dismal success rate of change initiatives are that they are driven by poor and invalid strategic decision-making, poor execution by leaders, and unrealistic expectations regarding value-added and return on investment in change initiatives. Additionally, frameworks that businesses implement which aimed to secure sustainable long-term competitive advantages in the marketplace are not effective (Todnem, 2005; Smith, 2011; Miller, 2001; Aiken & Keller, 2009; Kotter, 2008; Beer & Nohria, 2000). Decision-making related to improving results is critical, and must be based on an organization's preset criteria (Nutt, 2007). Setting performance indicators allows leaders to detect signals that lead to performance deficiency when performance drops below preset criteria. Creating and prioritizing critical performance indicators, such as profit, market share, or customers' satisfaction, can direct leaders' attention to the right change decisions regarding the needed change (Guerra-Lopez, 2009). Aside from collecting information to inform change initiatives, *how* people collect information to make change-based decisions (Quinn, 1980, 1990, 1996) is relevant to achieving successful outcomes. Quinn (1980, 1990, 1996) examined the data collection methods of ten major corporations and concluded that decision-makers usually do not pay attention to information available from objective means, such as formal reports. However, decision makers do tend to consider screens, such as value, beliefs, perception, or other subjective measures as means to collect information. These screens create overlap, inconsistency, and lack of

focus, which prevents valid comparisons between the current situation and the expected future results. Gigerenzer (2014) stated that executives in manufacturing, automotive and healthcare industries relied most of the time 76% on gut feeling. The author emphasized that professionals who relied on gut feeling cannot justify the reasons of their decisions until a problem occurs, which is too late. Blenko et al., (2010) confirmed that there is a correlation between data-driven decisions based on understanding the consequences and their impact of the business and financial performance. In addition, making structural change before understanding, prioritizing, and analyzing decisions might destroy an organization's value. Research report by Watson (2012) confirmed that only 39% of businesses are considered to be effective in using adequate resources to measure organizational change priorities and their potential impact. The overwhelming evidence against subjective decision-making in change process clearly demonstrates the need for data-informed decision processes.

The current literature suggests various change models can be broadened to have more complex approaches and structures. This change may cause a frustrating work environment that will hinder business leaders from making informed decisions and implementing positive change (Stragalas, 2012; Caldwell, 2013; Todnem, 2005). Assessing organizations and employees' performance before initiating and implementing change are critical. Leaders must be able to determine whether organizations and their employees' skills and knowledge are capable of closing gaps discovered as part of the NA process (Watkins & Wedman, 2007).

Initiating any CM process with a well-constructed NA is critical for businesses' success. Business needs that are not clearly identified or prioritized based on gaps between current and expected performance outcomes can result in chosen change initiatives to be misaligned with strategic objectives. Essentially, a poor plan can lead to disastrous consequences for the business

(Kaufman & Guerra-Lopez, 2013). Moreover, when considering potential change initiatives, it is vital for organizations to also consider whether or not their human capital has the required skills, knowledge, attitudes, and abilities to support the attainment of the change initiative objectives (O'Driscoll, 2003; Whelan-Berry & Somerville, 2010). Though NA is a vital precursor to CM, the empirical literature on the frequency with which change initiatives are selected through a NA process is scarce and must be examined from an organizational perspective

Purpose of the Study

The purpose of this study was to explore the extent to which NA processes precede CM initiatives. The study investigated the awareness and utilization of NA before and during the CM process.

Research Questions

1. To what extent are organizational professionals familiar and utilize needs assessment as a precursor to the change initiative?
2. At what organizational level of result are needs assessment focused (strategic, tactical, and operational)?
3. What, if any, are the differences in the frequency of needs assessment usage between professionals with different levels of change management experience and education?
4. What, if any, are the differences in the frequency of needs assessment usage between professionals with different levels of needs assessment experience and education?
5. What, if any, are the differences in the frequency of needs assessment usage across the organizational levels between professionals in different sectors?

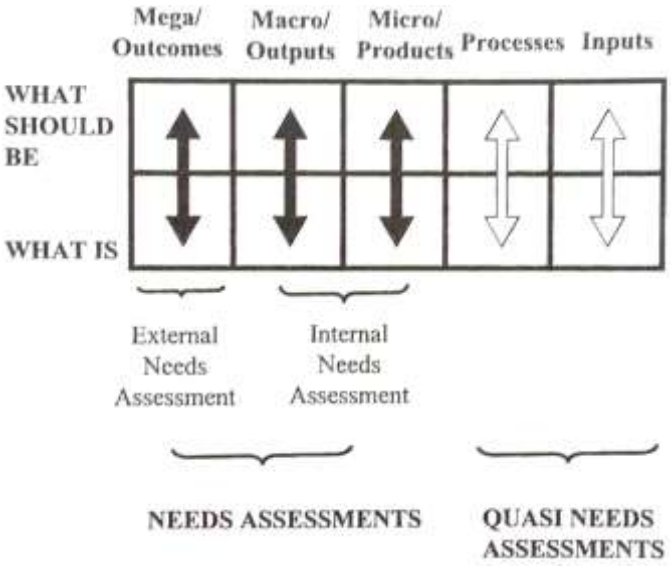
Significance of the Study

This study is significant because it will add further evidence to existing literature regarding the utilization of NA before and during the CM process, as well as introducing NA as an integral part of effective CM. Empirical studies have concluded current change models may be too complex, and that the process can lead to frustration and a lack of positive outcomes. Research linking NA to change intervention has not been adequately documented in the literature. The current research will specifically address this gap. The literature has scarce resources on the usage of NA as a decision making process in the CM field. Approaches similar to NA processes exist in the business analysis field, such as MoSCoW (must have, should have, could have, and would like to have in the future) and SCRS (strategy, current state, requirements, and solution). However, these approaches are discussed mostly in textbooks (Cadle, Eva, Hindle, Paul, & Ro, 2010), and are less known in existing literature. Findings from this study may enhance the change process, help decision-makers to better assess, design, develop, and manage interventions to achieve positive change, as well as set direction for an important line of research in performance improvement.

Conceptual Framework

Decisions will not produce positive change if they are not aligned across strategic, tactical, and operational levels of the organization. Decisions must also align with an organization's vision, goals, stakeholders' expectations, and, most importantly, the societal value placed within the organization. Therefore, the research questions were developed based on Kaufman's (2000) NA process across the organizational levels known as the Organizational Element Model (OEM) and the updated NA based on Kaufman and Guerra-Lopez (2013; See Figure 1).

Figure 1. Organizational Element Model



The OEM considers impact on four levels relevant to the organization: mega, macro, micro and quasi. First, the OEM sees societal value as part of strategic planning (mega level) which aligns with tactical planning (macro), procedures (micro), and individuals (quasi level). The OEM assesses organizational strategic planning by following a top-bottom instead of a bottom-top approach, which starts from the societal value and safety (mega level) to the organization' inputs and processes (quasi level). Needs assessment informs decision makers to better understand and recognize organizations and human needs to close the gap with results based on sound data purposely driven. Systems and Complexity theories account for the manner in which the organization works and how the systems interact. This theoretical understanding is imperative as change at one organizational level can impact other organizational levels. Organizations might make changes in their tactical level due to either performance deficiency or performance improvement, but they neglected further assessment on how their decisions were aligned with the

strategic and operational levels. Thus, use of an OEM approach can be a beneficial way to tackle decisions to incorporate CM efforts that will potentially yield the most successful outcomes.

Potential Limitations

One limitation of this study is the fact that the literature has scarce resources on the usage and familiarity of NA in the CM field. The current study utilizes a survey instrument to collect information from professionals who practice CM. Therefore, future studies based on qualitative methodology could gain a deep insight of their practices of NA within their profession. However, the survey is a good starting point as a data collection method to measure professionals' attitude and behavior regarding their familiarity and usage of NA as a process for CM.

Definition of Terms

Change creation: is a proactive process for organizations and individuals to plan, develop, and implement comprehensive change, and create the desired future for the organization (Lick & Kaufman, 2003).

Change management (CM): is a process that facilitates individuals and organizations to effectively adapt and transfer their current activity, process, or situation to future desired result. (Van Tiem et al., 2012; Todnem, 2005)

Chaos theory: "processes that appear to proceed according to chance, even though their behaviour is in fact determined by precise laws" (Lorenz, 1993, p. 4)

Complexity theory: "the emergence of order in dynamic non-linear systems operating at the edge of chaos: in other words, systems which are constantly changing and where the laws of cause and effect appear not to apply" (Burnes, 2005, p. 77)

Human performance improvement (HPI/PI): "is the science and art of improving people, process, performance, organizations, and ultimately society" (Van Tiem et al., 2012, p. 6)

Needs assessment (NA): identifying the "gaps between current and desired results—not means—and places those on priority order on the basis of the costs to meet the needs as compared to the costs to ignore the needs" (Kaufman & Guerra-Lopez, 2013, p. 9).

Operational results: are the products or internal building blocks of results delivered by individuals or small groups. This would be the direct consequence of applying skills, knowledge, and abilities toward meeting relevant work requirements (Kaufman & Guerra-Lopez, 2013; Kaufman, 2009).

Return on investment (ROI): is a critical measurement for accountability on decision making regarding the financial return of investing in new processes, initiative, or performance improvement intervention (Phillips & Phillips, 2005).

Strategic results: are the long-term goals and end results that focus on external clients and societal value (the ideal vision) which promote organizations to effectively and efficiently do what they do: use, produce and deliver internally and externally to achieve their vision (Kaufman & Guerra-Lopez, 2013; Guerra-Lopez & Thomas, 2011).

Systematic approach: "An approach that does things in an orderly, predictable, and controlled manner" (Kaufman & Guerra-Lopez, 2013, p. 181)

Systemic approach: "An approach that affects everything in the system" (Kaufman et al, 2003, p. 342).

Systems theory: "an organized or complex whole; an assemblage or combination of things or parts forming a complex or unitary whole" (Johnson et al., 1964, p. 367).

Tactical results: are short-term bottom-line results (mission) in terms of the payoff for the organization itself, for example financial gain (Kaufman & Guerra-Lopez, 2013; Kaufman et al, 2003)

The Organizational Element Model (OEM): "Identifies and links everything any organization, public or private, uses, does, produces, delivers, and the resulting payoffs for external clients and society" (Kaufman, 2000).

Summary

This chapter provided an introduction and background regarding the role of NA as a decision-making process. The current study's purpose, primary aims, significance, and justification were proposed. The study's theoretical framework was presented, important concepts and terms were defined, and potential limitations were noted.

The following chapter provides a compressive review of literature related to this study. The chapter presents a complete discussion of relevant definitions, theories, models, and fundamentals related to NA, CM, strategic planning, and human capital investment.

CHAPTER 2: LITERATURE REVIEW

Introduction

Implementing and managing change can be a daunting task, so much so that in some cases shutting down the organization is chosen over making changes (Watkins, 2007; Kaufman, 2005). In fact, the resistance to change is so great that two-thirds of change plans fail, especially when attempting to make significant changes (Sirkin, Keenan, & Jackson, 2005). Relevant, reliable, valid, and complete data are imperative to inform decision makers prior to implementing change. Organizational decision-making is greatly impacted by the source and type of data used to make strategic, tactical and operational decisions. Data have an immense impact on leadership's decision-making and can impact how well an organization can assess, identify, approach, and implement the *right* change for organizational success. Proper use and interpretation of data that are related to the overarching business goals and expected outcomes will improve the likelihood of successful outcomes. Thus, in order for businesses to successfully attain their objectives, they must have sufficient and effective data-driven means to guide the business to their goals (Guerra-Lopez & Thomas, 2011). The following sections will review needs assessment (NA) and making effective decisions based on sound data, change management (CM), strategic planning, change creation, and human capital investment and how those investments translate to the value-added prospect of CM initiatives.

Needs Assessment and Decision Making Based on Sound Data

The needs assessment (NA) process enables professionals to identify gaps between "what is" and "what should be", then prioritize by eliminating or minimizing gaps based on costs (financial consideration) and consequences (social consideration). The NA process delivers data-driven information to stakeholders so solutions will be based on strategic objectives and societal

and customer value (Kaufman & Guerra-Lopez, 2013; Watkins, Leigh, Platt, & Kaufman, 1998; Burent, 2009). Professionals in the field of Human Performance Improvement (PI) conduct NA as a vehicle to identify performance problems and facilitate changes in organizational structure and human behavior. By doing this, NA also works as a strategy to promote improvement that is aligned with the external environment (Anvari, Amin, & Seliman, 2010; Kaufman & Guerra-Lopez, 2013; Kaufman et al, 2003; Van Tiem et al., 2012). In order to be successful, NA must be supported by leaders and executive-level management. This is especially important in the corporate setting so the NA will enhance the individual and the organization's performance and gain a competitive edge in a global economy (Crossman, Crossman, & Lovely, 2009). Support and awareness from stakeholders is vital to ensure that workers understand the purpose for change. This understanding will create an environment that prepares employees to adopt changes and work toward strategic planning objectives. When workers do not understand the reasons behind organization's strategical decisions, they end up with "fake work", which will then result in misalignment with the organizational system and its direction (Peterson & Nielson, 2009). Drucker (2008) gave an example of Japanese top management decision making. Their approach to gain buy-in was to sell the decision. Meaning they provide evidence-based reasons to ensure that stakeholders were aware of the cost and benefit of their decisions, which were critical for organizational success. Serval studies emphasized the importance of securing full support from stakeholders before initiating any changes. They also recognized that ignoring the buy-in process and gaining support from top management would lead to implementation deficiencies of the change proposed, which would result in drawback of organizational performance hereafter (Garvin & Roberto, 2005; Davies, 1999; Paradise, Mosley, Worthen, & Timreck, 2009; Guerra-Lopez, 2009; Basu, 2015; Smith, 2002).

The effectiveness of recommended interventions depends on decision-makers' alignment with the organization's goals and vision. Even with a well-designed plan, change efforts can fail if there is not a clearly defined vision for change initiative (Kotter, 1995). Thus, organizations must effectively communicate in order to prioritize their decisions, expectations, goals, and activities in a way that clearly aligns with organizational and individual needs (Kaufman, 2009; Moor, Christenson, & Isher, 1987; Kaufman & Guerra-Lopez, 2013). Watson (2013) reported that organizations with effective communication strategies and objectives are three and half times more likely to significantly outperform their rivals. It is critical for leaders and managers to distinguish between nonessential tasks and important tasks. In addition, Watson (2013) found the establishment of a clear vision and goals as well as setting-up company's priorities were important for effective communication, CM, and financial performance. Prioritizing tasks involved discussions between stakeholders and key individuals within the organization in order to determine which tasks should be in the top of the list, bottom, or be dropped from the list. Most importantly, effective task prioritization will not be accurate if objectives are not clear and agreed upon by stakeholders and organizational leaders. Failure to prioritize will ultimately lead to poor decision-making not based on authentic prioritizing (Peterson & Nielson, 2009; Watkins & Wedman, 2007; Kaufman & Guerra-Lopez, 2013). For example, when the executive level does not contribute to the NA process, data to make and support decisions regarding new changes will not be adequate, resulting in poor system alignment with existing problems.

Decision makers overwhelmingly rely on their own judgment to evaluate available decisions. In fact, a recent study found that 93% of decision makers were able to identify the desired change-based results and what was needed to affect change, but they did not know how to proceed in order to accomplish their goals. Four percent understood how to produce 'means' but

they lacked being able to accomplish ‘results’. Finally, tactics that required both means and ends were seldom perceived by decision makers, which rate about only three percent (Nutt, 1984; Baer, Dirks, & Nickerson, 2013; Bauer, Schmitt, Morwitz, & Winer, 2013). Several performance improvement concepts were tested to identify the highest ranked concept most professionals focus on. It was found that most experts in the field of performance improvement 87% focused on results as an important concept to be considered during their practice (Toker & Moseley, 2013). However, NA was not chosen among the important concepts even though it helps professionals to identify both the means and the end results as well as how to get there. It is vital for organizations and their employees to work toward what is best for both the client and society. Change initiatives on all organizational levels must not focus only on what is best for the business, but how their decisions are prioritized and aligned with clients’ needs, and how their decisions add value to society. In a study by ATD (2014) fifty-one percent of businesses considered money as a top priority in implementing changes; 42% considered clients and customers’ demands and expectations as top priorities to change. Bernardez (2009) stated, “What is good for General Motors clients is good for General Motors” (p.77), not vice versa. Thus, organizations should assess first customer needs and what services and products will add value to society, this will guarantee a positive yield for the business.

In most companies, managers are accountable for decisions regarding the types of performance support systems the organization and/or employee’s need (Popescu, Popescu, & Iancu, 2010). This suggests that the advantage of utilizing NA before implementing any intervention is in providing data based-evidence that highlight NA advantages of growth and improvement. The fact is that some organizations jump to training as an intervention without going through NA process and as a result, they spend human and financial resources without considering

other valid and cost-effective options (Rossett & Schafer, 2006). Without NA, the differentiation between facts and opinion by decision makers might not be made. Managers and leaders depend on their own assessment of their power and confidence, which might not be compatible with their organization's current situation (Guerra-Lopez & Blake, 2011; Hobbs, 1987). Therefore, it is important for practitioners to select an appropriate data collection approach to identify the current situation, what it should be (identify the gap), and how to close the gap.

Guerra-Lopez and Blake (2011) have examined two different data collection approaches: the Discovery approach and the Idea Imposition approach. The Discovery approach aims to learn about options based on intelligence, desired outcomes, new ideas, and evaluation choices. This approach then utilizes the best and most appropriate and effective interventions, based on the most cost-effective decisions for the organization. For example, Nutt (2008) explained that decision-makers using this approach have more opportunities to learn and gather intelligence regarding organizational needs, as well as evaluate possibilities based on their cost and benefits. Smith (2002) examined the key reasons of organizational change failure. One of the reasons is that organizations rely on qualitative information such as opinions and perspectives, instead of relying on hard data-evidence that are based on quantitative information. On the other hand, the Idea Imposition approach relies heavily on what makes more sense to stakeholders. This approach limits and disables the ability to look outside initial ideas and perceptions based on their personal view of the situation. For instance, if an organization has an idea of implementing a common intervention, such as additional training, the data collection may be limited and focused only on supporting the initial idea (Nutt, 2008). However, if data collection is based on aligning the work's requirements and objectives with manager's needs through exploring options, the organization may be surprised by the amount of innovative performance support system ideas generated

(Guerra-Lopez & Blake, 2011; Stefaniak, Baaki, & Blake, 2012; Nutt, 2008; Stefaniak & Tracey, 2014). Guerra-Lopez and Blake (2011) found that decision makers who adopted a discovery approach were found to be more satisfied with their data collection strategies and were more confident about the success of their decisions. These findings are consistent with Nutt (2008). Decision-makers can be influenced by dissonance, such as beliefs, which tempt them to only consider information meeting their expectations (Nutt, 2007). As a result, decision-makers seek information that specifically support their thinking, attitudes, and positions. This approach leads to a confirmation bias, which misleads leaders in their efforts to recognize performance gaps. Because of this perception, leaders could void their initial decisions based on their biased interpretation. Therefore, decision-makers must decide which performance indicators are valid based on effective communication and data-based evidence collected using the NA approach (Guerra-López & Hutchinson, 2013).

Interventions that stem from decoding single performance indicators during NA will most likely require changes in organizational practices and structure. The effectiveness and efficiency of information learned during the NA will promote better chance of implementing necessary changes (Watkins & Wedman, 2007; Nutt, 2007). Hung and Altschuld (2013) found NA adds valuable information to stakeholders that enable them to prioritize and make decisions based on actual organizational and societal needs to develop and improve services specifically in the health care industry.

It is critical for organizations to align their work, workers, and activities as well as the decisions regarding changes that would most benefit society (Hung & Altschuld, 2013). Organizations often fail to manage change initiatives if they do not consider organizational changes' impact on societal value. When an organization attempts to reduce their production cost,

they often must go through several change initiatives to accomplish their goal. However, decision makers should consider their approach on how to achieve their cost reduction level without hindering clients, society, or product quality, which ultimately will damage the organization's reputation. It is critical for organizations to understand and believe that "No company can do well when its customers and clients don't. No product or service can consistently make money by harming or impoverishing their end users and consumers" (Bernardez, 2009, p. 78). A study by Aiken and Keller (2009) stated that one of the largest US financial-service companies went through three months of frustration and unsuccessful change implementation for their cost reduction program. The study revealed that once the company shifted it focus and attention to the society, customers, company, working team, and workers, their change program improved from 35.4 to 57.1% in one month (Aiken & Keller, 2009). This strategy shift yielded a positive result because the company focused first on society and what was best for it (mega level), then focused on the company and how to operate (macro level), then on the team workers and their achievements (micro level), and finally the workers themselves in terms of their capability, readiness, and motivation (quasi level). Businesses and society need one another, thus organizations must establish a relationship with society while anchoring within their own operations and activities in order to attain their desired results (Porter and Kramer, 2006).

Strategic Planning and Change Creation

Businesses have no choice but to cope with marketplace competition and economic behavior as they occur while balancing consumer demand and societal needs (Appelbaum, St-Pierre, & Glavas, 1998; Harvard Business Review Press & Management Society for HR, 2005). In order to be adaptive through the change creation process, organizations must have strategic planning procedures in place. Change creation responds to change *proactively* to direct the future

of its planning, direction, and workforce performance (Kaufman et al, 2003; Lick & Kaufman, 2003; Griffin, 2006; 2012). Mangers with high level of competency tend to act proactively toward problems. They see problems as opportunities to improve the organization's performance as well as to avoid future crisis (Williams, 2015). One approach to strategic planning to inform change creation is the previously discussed needs assessment (NA). Through systematic analysis of the organization, future needs and barriers can be identified. Another approach to affect change creation is the Organizational Elements Model (OEM). The OEM assesses several organizational levels (mega, macro, micro, and quasi). The OEM considers the societal value as strategic planning (mega level) and aligns it with tactical planning (macro), procedures and requirements (micro), and individuals (quasi level). Businesses aligning their activities and operations with strategic results, as system, have better chance to gain sustainability in the marketplace among rivals. Watson (2012) found only 31% of companies are able to sustain the positive impact of change in the long-term. Thus, strategic positioning is vital for organizations to have a clear vision for the future. Planning change must take into account internal and external environmental factors, as well as customer and societal needs (Porter, 1996).

Some organizations consider themselves the *system itself* and their department and workers are *part* of the system. In actuality, the organization is *part* of the system and it should not be considered as the system itself (Kaufman et al., 2003). If the organization operates as if it is the system (as a whole), it will isolate its strategic, tactical, operations, procedures, and individual practices from the external environment. This isolation from clients, customers, competition, and societal values will limit the effectiveness of strategic planning and change creation. By (2005) argued that most top managers do not have a comprehensive understanding of

the consequences of their actions regarding required change initiative to cope with the marketplace in the future, which puts the company in a critical situation once the change becomes an absolute.

The seminal work of Kaufman (1977) explained two types of NA. Internal NA is the most common approach, and is implemented from within the organization. External NA focuses on the business environment. Consideration of the external approach first will allow decision makers to form an effective internal NA, in order to identify goals and objectives that align with the mega and macro environment. Investigating the external first then the internal environment would eliminate a possible gap by aligning the goals with the accomplishment (Kaufman, 1977). Change is critical for any organization in order to meet the needs of a world in constant fluctuation. Without considering and predicting the external environment, effective change will not occur. In addition, Kaufman (1977) concluded that resistance is one of the greatest obstacles to change because individuals are uncomfortable shifting their behavior from the familiar to the unknown.

The OEM, as previously discussed, assesses organizational strategic planning using a top-bottom instead of bottom-top approach, which starts with societal value and safety (mega level) to the organization' inputs and processes (quasi level). Rolling-up tactical planning may force the organization's departments to operate independently and use their own strategic planning to roll-up their services or products to clients or to the market. Abandoning the top-down approach may be considered too risky in certain markets because the bottom-up approach may lead goals and objectives to be assumed or pre-specified before setting direction (Kaufman, Stith, & Kaufman, 1992; Kima, Stingb, & Loch, 2014; Loch & Kavadias, 2015; WorldatWork, 2007). The organization, as part of the system, must consider the subsystems as part of the external environment to enable the whole system to function effectively, efficiently, and cohesively (Griffin, 2006; 2012; Rummler & Brache, 1995; 2013). According to Kaufman and colleagues

(2003), the system is the sum of its components. These components work independently, but also in concert, in order to accomplish desired goals. Therefore, the rolling-down tactical planning defines which part of the system must work together to reach a shared objective. This approach provides any businesses an opportunity to modify, change, or invent new services and products based on their external clients' survival, value, satisfaction, and expectations. However, as mentioned before, both tactics can be useful in different industries and integrating both tactics would help the organization to recognize what approach best fits its organizational system design and structure (Kaufman et al., 1992).

The systems approach based on complexity theory posits that individual activities are complicated because they are often construed with nonlinear dynamics (Levy, 2000). Conversely, linear cause-and-effect models suggest that small changes within the early stages of a complex system can significantly alter long-term behavior (Jang, 2008). Therefore, an organization should not isolate the system's components (individuals), operations, or needs from the organization's summative vision and objectives (Richey, Klein, & Tracey, 2010). Individuals in the system must receive the right performance support in order to meet the new job description and change initiatives (Drucker, 1985). This support, coupled with motivation and feedback will encourage smooth communication and interaction between the organizational levels throughout times of change and transition. This interactive process will produce positive results, and facilitate successful change implementation (Richey et al., 2010).

Change Management

Change management (CM) is a systematic approach that focuses on organizational improvements at the individual and organizational level. The CM examines the structure of an organization, and its capabilities to adopt and maintain effective change to meet the needs of

internal and external entities (Nasir, Abbas, & Zafar, 2014; Todnem, 2005). The continuous improvement is often referred as ‘Kaizen’ which is a Japanese word that means ‘change for the better’ and can be considered as a reactive approach (Seekri, 2011), which involves scanning the organization’s processes and activities for any deficiencies (Zafar, Rajpoot, & Khalid, 2014; Van Tiem et al., 2012; Finch, 2011). Change models typically address the critical aspect of goal clarification, and create a sense of urgency. Clarified goals identify a desired state of change, and how those changes will appear after implementation has taken place (Whelan-Berry & Somerville, 2010).

Organizations often take an inadequate approach when facing changes by ignoring, resisting, or fearing new approaches or solutions (Lick & Kaufman, 2003; Beer, Eisenstat, & Spector, 2011; Appelbaum, St-Pierre, & Glavas, 1998; Caldwell, 2013). Therefore, CM becomes a reactive process not only for the situation creating the need for change, but in response to those factors against the change (Lick & Kaufman, 2003; Todnem, 2005; Griffin, 2006; 2012; Van Tiem, Karve, & Rosenzweig, 2006). In fact, 70% of CM initiatives are considered unsuccessful due to poor decisions. These poor decisions lead to poor execution and unrealistic expectations of the change initiative. Additionally, the value-added and return on investment in relation to the inefficient implementation approaches are adversely affected (Todnem, 2005; Smith I. , 2011; Miller D. , 2001; Aiken & Keller, 2009; Kotter, 2008; Beer M. &., 2000). Only 55% of change initiatives are considered successful and only 1 in 4 are effective in maintaining change strategies and objectives in the long-run (Watson, 2013).

Reactive approaches contribute to the high failure rate of change initiatives. These negative outcomes reinforce the need for organizations to utilize data-driven approaches in order to create successful and effective change efforts. One factor that leads organizations to experience

change failure is the managers' level of education and the length of time spent in dealing with CM. It was found that less experienced managers used a comprehensive CM approach more often than experienced managers did. This could be due to more recent and updated education that less experienced managers acquired during their own training (Siegal, Church, Javitch, Waclawski, & Burd, 1996). Individuals are typically categorized as experts only if they have had at least ten years of deliberate practice in a specific domain (Toker & Moseley, 2013).

The foundational change model (Lewin, 1951) helps improve operational conditions within an organization through three critical stages of change: unfreeze, moving/changing, and re-freeze. The first stage, unfreezing, focuses on "loosening-up" the organization as well as existing operations and procedures. By doing this, members become more aware of changes needed, and create an environment that supports change readiness. The second stage consists of managers and leaders being able to identify, develop, and launch change initiatives. Finally, the re-freezing stage stabilizes and confirm the changes across the organization to ensure proper alignment and effectiveness (Gareis, 2010; Drzenskya, Egolda, & Dicka, 2012; Caldwell, 2013; Lewin, 1951). According to Todnem (2005), the Lewin change model lacks operational specificity (Griffin, 2006; 2012) and is a broad framework that is based on the intended change, the organization's leadership style, and how the internal and external environment may complicate the implementation process of change (Caldwell, 2013; Higgs, 2005).

Kotter's (1996; 2012) model is a prominent change model designed to assist and lead organizations through transformational change. The model consists of eight steps: (a) create a sense of urgency; (b) create and manage an alliance; (c) identify the organizations' vision; (d) communicate the vision between all members; (e) endow and motivate members to work toward the vision; (f) create short-term victories; (g) support and consolidate improvements; and (h)

integrate the new approaches/changes into the organization's culture (Gareis, 2010; Kotter, 1996; 2012). Kotter's model emphasizes the urgency for change, and identifies potential crises. Close to 50% of companies fail to accomplish the first step, and fail to establish a sense of urgency simply because they take this step for granted. Creating urgency by making all workers aware of the change approach to be enacted (Kotter, 1996; 2012) is one way to address this commonly missed step. After all staff are informed, the organization can assemble a group with the power to lead change efforts and encourage teamwork. By informing staff of the change effort, a mutual, vision is created, which helps direct change efforts and develop strategies to communicate and shape an overarching vision. Next, workers' are aligned with the change initiative in order to avoid obstacles and form a coalition within the organization. The next steps include changing systems or structures that do not fit the transformation vision, planning for visible performance improvements, and rewarding workers' involvement in the change process. Finally, an organization must clearly articulate the connections between new behaviors and organizational success while developing the means to ensure leadership development and succession (Smith, 2011; Harvard Business Review Press & Management Society for HR, 2005; Kotter, 1996; 2012). Although Kotter's model has been validated through research and has been introduced to graduate management programs, there is limited use of this model by corporations in different industries, possibly due to gaps in translation (Stragalas, 2012). The model provides a framework and starting point for action that businesses can utilize, but does not provide a systematic action plan. Therefore, the model might become frustrating and challenging for implementation of successful change initiatives, due to the nonspecific approach of this model (Stragalas, 2012).

While the Lewin's change model is easily adapted to many organizations, it is still a reactive approach (Gareis, 2010; Drzenskya, Egolda, & Dicka, 2012; Caldwell, 2013), and using

reactive approaches can place organizations in a critical situations (Lick & Kaufman, 2003; Todnem, 2005). The time necessary to maneuver resistance through a reactive approach can make it difficult to move forward in a competitive marketplace. One particular approach, the Diagnostic Front-End-Analysis, alleviates this resistance by allowing organizations to systematically view the problem in a more effective way when there are identifiable symptoms or issues preventing the firm from achieving its goals. This approach follows three important phases: problem identification, identifying the cause, and intervention. The first phase, problem identification, involves collecting the organization's history and gathering data that lead to clarifying and confirming what the real problems are. It is also critical during this phase to identify client, business and societal objectives, and compare them to existing operations. The second phase, identifying the cause of existing problems, involves making assumptions about the cause of these problems and carefully testing them. Success in this phase will ensure that the root of the problem has been eliminated, and may prevent the problem from occurring again. The third phase entails selecting the right intervention relevant to the current situation and desired result (Bichelmeyer, 1999; Dixon, 1988; Harless, 1978; 1992). Completion of this step depends on successful execution of stage two. Related data must be aligned at each step in order for the solution to be effective and enduring.

Individual readiness is a critical component for organizations to successfully implement and manage positive change. Readiness can be defined as individuals' belief, attitude, and understanding of proposed change initiatives, and their ability to align themselves with the new changes. Providing opportunities for workers to improve their skills and knowledge in using new technologies can increase their commitment and readiness. This can then increase worker's confidence in their ability to adapt to organizational change (Weiner, Amic, & Lee, 2008). In

addition, individuals' self-efficacy and belief in their capability leads to success in managing an unpredictable environment. Self-efficacy is a basic determinant of individuals' behavior. The more opportunity employees are given to express self-efficacy in their ability to change, the more effort they will learn, accept, and adopt to changes (Richey et al., 2010; Jones, Jimmieson, & Griffiths, 2005; Caldwell, 2013; Griffin, 2006; 2012). It is common for leaders and managers to make decisions regarding change implementation before considering the congruence between employee acceptance and change effort expectation. Accurate assessment of factors that may interfere with change readiness is vital to understanding critical areas within the organization that must be addressed before successful change may occur (Jones et al., 2005).

Most organizations believe that their managers are capable of managing change, because they are specifically trained to know how to adopt, implement, and manage change. In fact, 82% of businesses use training interventions to help managers accomplish change, but only 22% of these managers reported that these trainings were effective in guiding managers to understand change complexity in organizational transformation (Watson, 2012). Organizations should consider economic requisites in addition to the knowledge and skills employees need to adequately respond and adopt change. O'Driscoll (2003) found economic volatility and unpredicted rapid shift are conducive to an unstable business environment. This unpredictability requires businesses to develop an effective response for continued survival and competitive advantages in the marketplace. The primary means in society are more focused on knowledge than on worth of human capital or natural resources. Knowledge is a vital raw material, and people obtaining key knowledge play important roles in economic value creation. Moreover, 98% of businesses report a need to receive more productivity and develop performance within their workforce (Csoka, 1994), supporting the value of building human capital and skill.

The efficiency and effectiveness of human capital in the change process is based on commitment and motivation. Consultant services and human resources have been found to be more capable of applying CM models than those in the financial industry (Siegal et al., 1996). Within the Iranian hospitality industries, Anvari, Amin, and Seliman (2010) examined employees' motivation to learn, their perceived support, and training attitudes within psychological contracts, job involvement, affective commitment, and personal NA. The study addressed the importance of first developing a strategic NA in order to increase employees' commitments, motivation, and decrease the turnover rate. The findings suggested hospitality companies must pay more attention to their employees' training needs to align their commitment and motivation with the change strategies (Anvari, Amin, & Seliman, 2010). Therefore, the main challenge for businesses and corporations is understanding how to invest in human capital to improve workers' performance and to have positive added-value from their investment in human capital (O'Driscoll, 2003).

Human Capital Investment and the Value-Added:

Human capital awareness of strategic planning is critical to the organization's overall functioning (Kaufman et al, 2003; Kaufman & Guerra-Lopez, 2013; Rossett, 2009). Inefficient human capital can potentially jeopardize the effectiveness of implementation of strategic change. Some resource-based theorists suggest implementation of performance support systems, such as training. Such an intervention can be considered strategic planning to ensure change effectiveness, which in turn promotes the organization to maintain and sustain long-term competitiveness (Chi, Wu, & Lin, 2008; Rossett, 2009). This raises some important questions, not just regarding investment in human capital, but also the workers' awareness of the organization's objectives. Understanding this dynamic can assist the organization in identifying the degree to which workers are ready and willing to adopt and how to achieve change in the workplace. Chang, Chiang, and

Yi (2012) found that workers retained about 10 to 15% of training content after one year, and just 10% of these expensive, and largely ineffective, training activities are transferred to actual job tasks (Hutchins, 2009). Therefore, supportive interventions must align with the organization's overall business strategy in order for the investment to yield a positive financial return and long-term performance improvements. Peterson and Nielson (2009) found that 73% of employees do not think that they can implement the business's objectives into their workplace due to lack of required knowledge and skills. This tells us that organizations are designing and developing strategies that are not reasonable, nor applicable, because they do not consider the competency of employees to move the strategy forward. Drucker (2001) stated, "The most important contribution management needs to make in the 21st century is similarly to increase the productivity of KNOWLEDGE WORK and the KNOWLEDGE WORKERS" (p.116).

Organizational survival depends on the continuous learning and development of its human capital to effectively cope with rapid changes in the competitive business environment. According to Harless (1978; 1992), implementing new strategic change requires using the planning front-end-analysis approach. This approach focuses on several steps to develop, design, and align new performance support systems required for change. Organizations change procedures, operations, and strategic plans to cope with the competitive marketplace and other economic challenges (Harless, 1978; 1992). Effective performance support systems must consider the importance of aligning motivational aspects with the strategic planning of organizational change. This will ensure that both the organization and human capital are committed and ready to accept changes with confidence and, in turn, increase overall productivity. Employees must believe they possess the right knowledge, skills, behavior, and motivational instruments to apply the change (Harless, 1978; 1992). Therefore, professionals are under pressure from businesses to improve the

alignment of performance support systems with the organizational vision and objectives, which will lead to positive organizational productivity and growth. Beer, Eisenstat, and Spector (2011) studied six large companies during a time when top management was attempting to revise the way they operated. Their research revealed that concern for people and their needs, decision-making, and work organization influenced performance in the long term, thus making the change more acceptable and applicable. Learning and development are vital investments to ensure employees are capable of adapting to and sustaining change. Even with this widely accepted belief, only 17% of 765 surveyed businesses and learning professionals believed that their organizations were highly effective at managing change (ATD, 2014). This finding reinforces the need to create relevant and active learning opportunities that prepare employees to work with the unpredictable demands of organizational transformation.

Managers and decision makers are well aware of and capable in dealing with the complexity of CM efforts and fixing the problems that arise during the process. Fixing problems can be approached in different ways; some professionals jump to fix performance problems without first understanding and scrutinizing the underlying issues. This approach is crucial which could lead to future disasters in organizations, especially in complex system structures (Kaufman, 2014). Managers often devote a majority of their time managing organization and employees' performance and yet, make poor decisions regarding employees' promotion and training (Drucker, 1985). It is interesting to note that 82% of companies train their employees on new skills and knowledge that are required for the change to be successful. However, only 36% of those same companies stated that these trainings were effective (Watson, 2012). This creates a gap between the organization's change objectives and the required skills and knowledge for successful change to occur. For instance, most banks have an individual training organization, which has a positive

management approach for training support and budget. However, there is a deficiency of NA and banks are not investing in assessing the organizational and human needs, which should be aligned with the business goals and change outcomes (Ferdous & Razzak, 2012). Organizations that use the systems approach to view the structure of their organization, and understand how change affects each part of the system will be able to close gaps between organizational and human needs.

Successfully implementing a systems perspective may yield positive attitude and behavior from employees, as well as positive return on investment. Human capital investment has numerous positive impacts on workforce productivity. In fact, companies that invested an average 10% in their employees by providing an opportunity to learn and develop their skills led to 8.5% increase in overall productivity (Black & Lynch, 1996; Li, Qian, Gong, & Tao, 2014; Nguyen, Truong, & Buyens, 2011). In addition, a significant positive impact on employees' performance was identified by taking just one training session that was directly related industry needs. This result encourages decision makers to invest in their workforce before spending financial resources in organizational development and change. In order to have the right people with the right knowledge and skills to implement and work throughout the change process, investment in human capital is essential, and will more often than not result in the ability to be competitive in the marketplace (Bapna, Langer, Mehra, Gopal, & Gupta, 2013).

Assessing the organization as well as individual performance and competency prior to initiating any change is critical to determining whether the organization is capable of closing gaps discovered during the NA process (Watkins & Wedman, 2007). Human capital investment that is designed to increase individuals' performance plays an important role in motivating workers to acquire these skills and apply them effectively (Caldwell, 2013). The human capability in any organization is considered a critical advantage (in term of knowledge, skills, and capability) that

allows organizations to possess and sustain a competitive advantage in the marketplace (Barney & Hesterly, 2009; Barney, 1991; Bapna et al., 2013). Cascio and Boudreau (2008) stressed that organizations must understand the link between workers' behavior, motivation, knowledge, and skills and the business's strategic planning and financial performance. The authors provided an example of Sears (a major retail department store in the USA) and how the company recognized the change of workers' behavior and motivation when they connected and aligned their job requirements with the company' objectives. This significant shift in thinking yielded a positive financial return as well as lower employee turnover rates. Therefore, leaders and managers should align worker motivation with the organization's environment, so workers can value their accomplishments and more readily pursue exemplary performance (Van Tiem et al., 2012). Additionally, it is critical for organizations to have effective skill development programs in order to maintain competent leaders who can effectively enact new strategies and positive changes. Many organizations spend time and money to build their own customized talent development structures that align with their strategic planning goals. Most professionals could identify core components of talent development, such as NA, CM, learning technologies, and training delivery (Miller, 2015).

Summary

This chapter provided a pertinent review of the literature, shaping the theoretical framework of this study. The chapter presented important elaborations pertaining to NA, CM, strategic planning, and human capital, and discussed how systems and complexity theories play a critical role in both the business environment and with change strategies. However, extant literature lacks studies regarding NA's role across organizational levels and how professionals use NA as an approach to CM. The following chapter illustrates the methodology that was developed and

utilized for this study to answer the research questions. Data collection procedures, target population, sample selection, and instrument development were explained and justified.

CHAPTER 3: METHOD

Research Design

This study utilized a quantitative research design using a survey method. Surveys have become a common method to collect data, as they are a reflection of individuals' attitudes, behavior, and opinions. Surveys are considered an accurate method for measuring the experiences of those who are in charge of making decisions and executing plans, particularly for business applications (Fink, 2008; Parker & Rea, 1992; 2005; Marrelli, 2009). Surveys also enable the collection of a wide variety of autobiographical information (e.g., education, experience, background, and preferences). The use of surveys to determine outcomes and attitudes has been considered an acceptable and credible method of data collection from well-known academic institutions (Parker & Rea, 1992; 2005).

Population and Sampling

This research surveyed individuals involved with organizational decision-making, particularly those who have a responsibility for recommending, selecting, and implementing change initiatives. However, because the entire population was unknown or not accessible, a sampling framework was used to select the most appropriate respondents. The sample was selected from members of the following associations:

1. The International Society for Performance Improvement (ISPI) located in Silver Spring, Maryland and ISPI- Royal Oak, Michigan (via email & LinkedIn group).
2. The Association for Talent Development (ATD), located in Alexandria, Virginia and ATD-Detroit, Michigan (via email & LinkedIn group).
3. The Society for Human Resource Management (SHRM) located in Detroit, Michigan (via LinkedIn group).

4. The Strategic Management Society (SMS) located in Chicago, Illinois (via LinkedIn group).
5. The Association of Change Management Professionals (ACMP) located in Oakbrook Terrace, Illinois (via LinkedIn group).

These professional organizations rely on membership involvement. They encourage involvement in the business world through professional meetings, conferences, and workshops. Membership includes leaders, business owners, practitioners, and educators. Because members from these professional organizations tend to be involved in strategic planning as well as some aspects of change and CM to improve performance, their participation added value to this study.

In order to gain the most valuable information for this research, a purposive sampling strategy was implemented to select individuals who could contribute the most valuable information regarding this study. Purposive sampling is a non-random sampling method that enables access to hidden populations through internet surveys, is widely used in qualitative studies, and is effective in engaging individuals whose reliability cannot be confirmed through traditional research methods (Barratt, Ferris, & Lenton, 2015; Heckathorn, 1997; Lewis & Sheppard, 2006). In the current study, participants answered one screening question regarding their job's role before entering the survey, in order to determine their eligibility to participate on the survey. Therefore, the following eligibility criteria were used:

- Working in either a corporate leadership position (CEO, CFO, COO, and CMO, VP levels) or management level who has the authority to assess, analyze, implement and make decision regarding CM; AND / OR
- Owning a business and making all the decisions regarding CM strategies and implementations; AND / OR

- Working with leaders as change agents and involved in the decision-making process regarding change with leaders (such as professionals working in learning and development, performance improvement, organizational development, etc.).

A power analysis (Dupont & Plummer, 1990; Faul, Erdfelder, Lang, & Buchner, 2007; 2009) was conducted to calculate an appropriate sample size for this study. Researchers can effectively manage time, resources, and study budget when estimating sample size before conducting data collection. Additionally, ensuring the sample size is adequate through the power analysis ensures that the likelihood of a Type II error is minimized (Bosco, Aguinis, Singh, Field, & Pierce, 2015). Using the recommended setting for a two-tailed test (Suresh & Chandrashekara, 2012), the minimum number of groups for this study was six. To realize a minimum effect size (f = 0.30) (Cohen, 1973; Sawyer & Ball, 1981; Bosco et al., 2015) the estimated sample size for this study was 150.

Participants

The current study included a sample of 164 participants. The majority of the participants were leaders (n = 91, 55.49%), and 73 (44.51%) identified as consultants. With respect to reported educational level, 87 (53.05%) of the participants reported having a master's degree, 45 (27.44%) participants had a bachelor/professional degree, and 32 (19.51%) participants had earned a doctorate/specialist degree. More than half of the participants reported that their business location was in North America (n = 111, 67.68%), 23 (14.03%) were in the Middle East, nine (5.49%) were in the Australia and Pacific, nine (5.49%) were in Europe, five (3.05%) were in Africa, four (2.43%) were in Asia, and only three (1.83%) were in South America. Just over half of the participants were working in training and development industry (n = 52, 31.71%), 34 (20.73%) reported working in manufacturing, 34 (20.73%) also worked for government or non-profit

organizations, 25 (15.24%) were in healthcare, 13 (7.93%) were in education, and only six (3.66%) of the participants were working in financial institutions. The majority of the participants (*n* = 66, 40.24%) had less than 50 employees in their organizations, 64 (39.03%) had 1,501 or more employees, 18 (10.98%) had 101-500 employees, 10 (6.98%) had 501-1500 employees, and only six (3.66%) had 50-100 employees in their organizations. Demographic information presented above is also available in Table 1.

Table 1

Demographic Characteristics of Participants (N = 164)

Characteristic	n	%
Groups		
Leaders	91	55.49
Consultants	73	44.51
Educational Levels		
Bachelor's/Professional Degree	45	27.44
Master's Degree	87	53.05
Doctorate/Specialist Degree	32	19.51
Business Location		
North America	111	67.68
Middle East	23	14.03
Australia And Pacific	9	5.49
Europe	9	5.49
Africa	5	3.05
Asia	4	2.43
South America	3	1.83
Industry		
Training and Development	52	31.71
Manufacturing	34	20.73
Government/Non-Profit	34	20.73

Healthcare	25	15.24
Education	13	7.93
Financial Institutions	6	3.66
Organization Size		
Less Than 50 Employees	66	40.24
1501 or More Employees	64	39.03
101-500 Employees	18	10.98
501-1500 Employees	10	6.98
50-100 Employees	6	3.66

Note. Totals of percentages are not 100 for every characteristic because of rounding.

Instrumentation

Survey

The survey administered in this study was based on Kaufman's (2000) Organizational Element Model (OEM) and the updated NA model (Kaufman and Guerra-Lopez, 2013). The survey examined how critically professionals in organizations think about the impact of their decision-making at each organizational level and how they approach the change process from system, systematic, and systemic views. The survey specifically measured attitude toward change decisions and implementation, as well as the extent to which NA methods utilized (behavior) during the change process. Measures were arranged into three sections of the survey (See Appendix 2): (1) demographics, (2) NA familiarity, and (3) NA utilization. In order to gain accurate and genuine feedback through the survey, these sections were not identified to the participants since this might be considered leading to inaccurate results (Fowler, 1995). Three categories were created in order to generate functional variables. First, common processes included survey questions that represented same procedures at each organizational level: strategic, tactical, and operational. Second, essential processes included two survey questions from strategic level and all common processes questions. The third category represented processes familiarity (See

Table 2). The following is a detailed description of the survey. It is important to note that only items that were included in the analyses are described below.

- The demographic section, which includes level of education, type of industry, and years of experience in CM and NA.
- NA familiarity included two questions: first question asked to what extent participants were familiar with the NA term; and the second question asked to what extent participants were familiar with the NA processes. The aim of these two questions was to compare between what participants thought about their knowledge of NA term, processes, and their actual essential NA usage, which were unfolded through their responses from the survey questions (See Table 2).
- NA utilization section includes questions asking participants to rate their actual utilization of steps and processes of NA during the CM process across the three organizational levels: strategic, tactical, and operational, including the common process category (See Table 2).

Table 2

Needs Assessment Questionnaire Description

	Survey Questions	Usage					Familiarity
Items		S	T	O	CP	EP	F
To what extent do you agree with the following statements:							
1	I am familiar with the *term* Needs Assessment						F
2	I am familiar with the Needs Assessment *process*						F
How often do the following reasons drive your organization to initiate change?							
3	Market competition		T				
4	Cost reduction		T				
5	Meeting customer demand		T				
6	Saving money		T				
7	Adding value to your community/society	S				EP	
How often do you use the following strategies:							
8	I address issues before they become a problem	S				EP	
How often do you use the following strategies as part of your ongoing change management approach:							
9	I prioritize gaps before making decisions	S	T	O	CP		
Before starting any change process, I:							
10	Identify the stakeholders (clients, managers, owners, etc.) that could ***influence*** the change process	S					
11	Obtain stakeholders buy-in before initiating any changes	S	T	O	CP		
12	Communicate with clients, customers, community members who will/could be ***affected*** by our decisions.	S					
13	Define the organization's objectives/goals	S					

14	Define the agreeable measurable performance related needs			O	
During the change process, I align stakeholders' interest with:					
15	The organization's vision	S	T	O	CP
16	The organization's mission		T		
17	The organization's objectives			O	
When assessing gaps in performance, I consider:					
18	Employees or group of people perspectives			O	
19	Organizational performance		T		
20	External societal impact (including value added to clients)	S			
When working with your organization, you consider the following during the change process:					
21	Vision	S			
22	Mission		T		
23	Operational objectives			O	
In regards to your position, to what extent do you perform the following tasks:					
24	I assess knowledge and skills required to implement change.			O	
25	I evaluate the return on investment/value-added on any performance support (training, job aid, etc.) before implementing the change		T		
26	I communicate the purpose of performance support tools with employees before implementing them.			O	
27	I communicate the organization's current situation with all employees.	S	T	O	CP
28	I communicate the organization's *desired results* with all employees across the organizational levels.	S	T	O	CP
29	I communicate the organization's *expectations* with all employees across the organizational levels.	S			
30	I explain how the change will ***benefit*** the organization and employees.	S	T	O	CP

31	I explain how ignoring the change will *cost* the organization and employees.	S	T	O	CP
32	I communicate the objectives of the change initiatives to all employees.			O	
	Based on your previous response, you offer performance support(s) based on:				
33	Training needs assessment			O	
34	Cost restrictions			O	

Note: S = strategic level; T = tactical level; O = operational level; CP = common processes; EP = essential processes; F = term/process familiarity

Survey Design

The survey contained two different six-point Likert-type scales (Allen & Seaman, 2007). Unipolar scales were used in this study in order to increase responses consistency (Beckstead, 2014; Moors, Kieruj, & Vermunt, 2014). The first scale measured frequency of a behavior on a scale of 1 (*Always*) to 6 (*Never*). The second scale measured attitudes and opinions on a scale of 1 (*Strongly agree*) to 6 (*Strongly Disagree)*. Using a six-point scale provided a wider a range of responses (Allen & Seaman, 2007). The scales used in this study did not include a midpoint option (natural option) in order to produce meaningful responses (Holmes & Mergen, 2014). Holmes and Mergen (2014) conducted a meta-analysis that indicated the results between scales without a midpoint option, such as four-point scale, and other scales with midpoint option, such as five or seven-point scale, are not significantly different. Because the survey assessed familiarity and utilization of NA methods from individuals who (themselves) make decisions; the natural choice might be misleading and inaccurate. Therefore, this response format helped participants to rate their knowledge, understanding, and practice (familiarity and utilization) of NA in a more accurate fashion.

Procedure

Participants were recruited by sending an email to the associations' president or executive director asking for their support by forwarding the survey request email to their members (see Appendix 1). The participants received information about the researcher, the study objectives and outcomes, and a link directed to Qualtrics, a web-based survey system administrated through Wayne State University, to access the survey via email. Based on the previously mentioned eligibility criteria, participants were asked one multiple-choice question to identify their job roles and responsibilities in order to enter the survey. When the eligibility criteria were met, participants were directed to continue with the survey. Participants were given the option to enter their information for a random drawing where they could receive one of the four prizes ($200, $150, $100, and $50 VISA gift cards). Their information was kept confidential and was not used to track their specific responses. Other strategies to incentivize responses included, branding the survey by sending it through well-known organizations in the field, explaining the purpose and outcome of the study, providing an approximate time to complete the survey, guaranteeing confidentiality, and showing the progress bar of their advancement in the survey (Paxson, 1995).

Validity

Content validity was utilized to ensure that the survey questions examined and assessed the construct of this research purpose (Haynes, Richard, & Kubany, 1995). A letter (See Appendix 3) was sent to three experts with considerable experience and insight in business-oriented NA processes (see Appendix 4) These experts reviewed the proposed instrument to ensure that the survey questions measured what they were intended to measure (Kitchenham & Pfieeger, 2002; Fink, 2008; Guerra-Lopez, 2007). An individual can be considered an expert when he or she holds a rich knowledge-base, and is familiar with procedural nuances relevant to the area of interest

(Onken & Caldwell, 2011; Toker & Moseley, 2013). Experience may be interpreted in different ways (Garrett, Caldwell, Harris, & Gonzalez, 2009). For example, an individual can be considered an expert when he or she is aware of the situational context of the topic, such as why, where, and how specific subjects are relevant (Toker & Moseley, 2013). Therefore, to validate the content of the survey questionnaire, the three experts were recruited based on their knowledge, skills, and experience in NA. Experts scrutinized the content, relevance, and clarity of the overall survey. In addition, pilot testing was utilized through a small group of advanced doctoral students to ensure questions were clear, appropriate, easy to read and understandable (Fink, 2008; Kitchenham & Pfieeger, 2002). The pilot study was sent out after the researcher received feedback from experts in the field (content validity) and the questions were revised accordingly.

Reliability

Reliability of the measure used in any research project is vital to test the extent to which the survey yields the same outcome over multiple occurrences. Cronbach's Alpha test was used in this study as a well-known method to test survey reliability (Carmines & Zeller, 1979). The Cronbach's Alpha was developed by Cronbach (1951) to measure the internal consistency of items in a test. According to Drost (2011), in order to improve the reliability of a survey, items should be clearly written and easily understood by participants. The greater the number of items in a survey, the more reliable it may be. The Cronbach's Alpha measures internal consistency based on a score that ranges between zero to one, where a score of 0.70 or above is considered acceptable (Carmines & Zeller, 1979; Cronbach, 1951; Drost, 2011).

To begin the analyses, mean scores were calculated for each organizational level, (strategic, tactical, and operational) as well as for NA essential processes, familiarity, and usage. Items under NA common processes across the organizational levels were analyzed individually. For this study,

the Cronbach's alphas for strategic, tactical, and operational level were 0.70, 0.71, and 0.76 respectively. The Cronbach's alpha for familiarity of NA terms and processes was 0.88, and 0.72 for essential processes (see table 3).

Table 3

Cronbach's alpha reliability for the five categories' means

Categories	Items *	Cronbach's alphas α
Strategic Level	7, 8, 10, 12, 13, 20, 21, and 29	0.70
Tactical Level	3, 4, 5, 6, 16, 19, 22, and 25	0.71
Operational Level	14, 17, 18, 23, 24, 26, 32, 33, and 34	0.76
Familiarity	1 and 2	0.88
Essential Processes	7, 8, 9, 11, 27, 28, 30, and 31	0.73

** Items numbers were taken from (Table 2)*

Data Analysis

Data were analyzed using the statistical software, IBM SPSS statistics version 23. Before starting the analysis, data were examined for input accuracy, plausible means and standard deviations, outliers, and assumptions. Next, several statistical analyses were performed to answer the research questions. First, independent-samples *t*-tests were used to examine familiarity of NA terms and processes between leaders and consultants', as well as to compare their utilization of essential processes. Potential differences between leaders and consultants in implementing NA across all organizational levels were also examined. Second, a simple linear regression was performed in order to test the relationship between professionals' familiarity of NA terms and processes, as well as their implementation of NA processes in the workplace. Third, a two-way factorial ANOVA was conducted to test the difference of using NA between leaders and consultants based on their level of education and CM experience, and another analysis with their level of education and NA experience. Finally, a one-way multivariate analysis of variance

(MANOVA) was used to test the difference between leaders and consultants in different industries in using NA in the different organizational levels, including the common processes.

Summary

This chapter provided a description of the methods used in the current study to explore professionals' familiarity and utilization of NA before initiating CM. An explanation of the data collection strategy, target population, sample selection, and instrument development, were provided. Instrument validation and development procedures were explained in-depth. Data analysis techniques and software selection were also discussed. The following chapter presents results of the statistical analyses used in this study.

CHAPTER 4: RESULTS

Data Cleaning

This study endeavored to discover the extent to which professionals were familiar with needs assessment (NA) as well as the extent to which they utilized it in their CM (CM) process. It explored several factors, which included professional roles, level of expertise, education, and type of industry. This study also investigated NA usage across three organizational levels: strategic, tactical, and operational. Finally, an effective decision-making process is integral to NA, thus, the use of data collection approaches was also explored and compared with subjects' level of knowledge, familiarity, and implementation of NA processes. The following discussion compared leaders and consultants across all variables examined in this study.

All study variables were checked for accuracy of input by examining individual ranges of each variable. Missing data were inspected, and 58 responses were deleted. First, 40 participants only answered the screening question and one geographic question. Second, 16 participants did not meet the eligibility criteria. Finally, two participants did not indicate agreement with the study consent form. The professional roles were collapsed into two groups: leaders and consultants. Education was also collapsed into three levels: bachelor/professional, master, and specialist/doctorate degrees. Reported CM and NA experiences were collapsed into three categories: 0-4 years, 5-10 years, and more than 10 years. For business location, several responses chose their location as "other". These responses were categorized under the appropriate region. For the industry type, several respondents chose their industry as "other". These responses were also categorized into the appropriate industries and then collapsed into six categories: government/non-profit, education, healthcare, financial institution, manufacturing, and training

and development. Scores were reversed so that high scores on the questionnaire represent reasonably high levels of the measured attribute.

Preliminary Analyses

Findings

Among participants who identified as leaders, 46 (50.5%) had been in their current position for 0-4 years, 17 (18.7%) for between 5-10 years, and 28 (30.8%) had been in their position for 10 years or longer. Additionally, 24 (26.4%) reported between 0-4 years of CM experience, eight (8.8%) reported between 5-10 years of CM experience, and 59 (64.8%) reported 10 years or more. Regarding leaders' NA experience, 35 (38.5%) reported between 0-4 years, six (6.6%) reported between 5-10 years, and 50 (54.9%) reported 10 years or more of experience. In addition, leaders' involvement in change initiatives in a yearly basis was (M = 5.02, SD = 5.29).

Among participants who identified as consultants, 41 (56.2%) had held their current position between 0-4 years, nine (12.3%) between 5-10 years, and 23 (31.5%) had held their position for more than 10 years. Regarding CM experience, 16 (21.9%) consultants reported between 0-4 years, four (5.5%) reported between 5-10 years, and 53 (72.6%) reported experience of 10 years or more. Regarding NA experience, 18 (24.7%) reported between 0-4 years, seven (9.6%) between 5-10 years, and 48 (65.8%) reported 10 years or more. In addition, consultants' involvement in change initiatives in a yearly basis was (M = 6.80, SD = 12.81).

Research Questions

Question 1: To what extent are organizational professionals familiar and utilize needs assessment as a precursor to the change initiative?

Independent-samples *t*-tests were used to compare leaders and consultants in their reported familiarity with NA, and usage of essential processes based on decision-making strategies (my gut feeling, group consensus, and data and statistics). A subsample of individuals

who only reported using statistical approaches was created. Multiple linear regression was performed on this subsample to determine whether reported familiarity of NA processes would predict greater implementation of NA processes in the workplace.

First, a comparison was made based on respondents' data collection strategies (my gut feeling, group consensus; or data and statistics). An independent-samples *t*-test analyzed the difference between leaders and consultant's familiarity of NA term and processes with the essential processes.

My gut feeling. This *t*-test examined differences between leaders and consultants in familiarity and implementation of NA essential processes. Subjects in this analysis were only those who reported "gut feeling" as their primary strategy to make decisions regarding change. Given a violation of Levene's test for homogeneity of variances, $F(1,30) = 4.80$, $p = 0.04$, a *t*-test not assuming homogeneous variances was calculated, and degrees of freedom were adjusted from 30 to 28.82. The results of this test indicated that there was a significant difference in roles between the two groups: leaders ($M = 4.53$, $SD = 1.56$) and consultants ($M = 5.42$, $SD = 0.04$); $t\ (28.82) = -2.19$, $p = 0.04$ (See Table 4).

Group consensus. This *t*-test examined differences between leaders and consultants in familiarity and implementation of NA essential processes. Subjects in this analysis were only those who reported "group consensus" as their primary strategy to make decisions regarding change. The Levene's test for homogeneity of variances was met in the present analysis, $F(1,46) = 0.49$, $p = 0.16$. There was a significant difference in the scores for leaders ($M = 5.21$, $SD = 0.70$) and consultants ($M = 5.67$, $SD = 0.04$); $t(46) = -3.21$, $p = 0.01$ (See Table 4).

Data and statistics. This *t*-test examined differences between leaders and consultants in familiarity and implementation of NA essential processes. Subjects in this analysis were only those

who reported “data and statistics” as their primary strategy to make decisions regarding change. Given a violation of Levene’s test for homogeneity of variances, $F(1, 78) = 26.44$, $p = 0.00$ a *t*-test not assuming homogeneous variances was calculated, so degrees of freedom were adjusted from 78 to 63.89. The results of this test indicated that there was a significant difference between the two groups: leaders ($M = 5.31$, $SD = 0.85$) and consultants ($M = 5.88$, $SD = 0.48$); $t(63.89) = -3.19$, $p = 0.00$ (See Table 4).

Table 4

T-test Result Comparing Leaders and Consultants on Needs Assessment Familiarity

	Professionals								
	Leaders			Consultants					
	M	*SD*	*n*	*M*	*SD*	*n*	*t*	*df*	*p*
My gut feeling	4.53	1.56	20	5.42	0.04	12	-2.19	28.82	0.04
Group consensus	5.21	0.70	27	5.67	0.04	21	-3.21	46	0.01
Data and statistics	5.31	0.85	41	5.88	0.48	39	-3.19	63.89	0.00

Second, a simple linear regression was conducted to determine whether NA familiarity significantly predicted NA implementation. Analysis was conducted based on professionals using statistical approaches to make decision regarding change. Findings revealed that there was no significant association between professionals’ familiarity of NA terms and processes, and their implementation of essential processes in their daily practice, $R^2 = 0.02$, $F(1,78) = 1.22$, $p = 0.27$. Professionals’ predicted NA implementation was equal to 4.08 + 0.12 (familiarity). The level of NA implementation increased 0.12 unit when knowledge of NA processes and strategies increased by one unit.

Question 2: At what organizational level of result are needs assessment focused (strategic, tactical, and operational)?

An independent-samples *t*-test was used to examine the difference between leaders and consultants in implementing NA across three organizational levels: strategic, tactical, and operational. The analysis is described in the following section, which starts with the NA common processes across the organization levels, strategic, tactical, and finally operational. Each analysis was conducted only for respondents who selected "data and statistics", as a main data collection source to make decisions regarding changes.

Common Processes

Data and statistics. An independent-samples *t*-test was conducted to test the utilization of NA common processes between leaders and consultants. The test revealed that there were significant differences in "obtain stakeholders buy-in before initiating any changes". Leaders (M = 4.62, SD = 1.09) reported significantly lower rates of utilization than consultants (M = 5.15, SD = 1.01); $t(76) = -2.26$, $p = 0.03$. Given a violation of Levene's test for homogeneity of variances in "explain how ignoring the change will cost the organization and employees", $F(1, 76) = 5.38$, $p = 0.02$, a *t*-test not assuming homogeneous variances was calculated, so degrees of freedom were adjusted from 76 to 70.84. The result showed a significant difference between leaders (M = 4.385, SD = 1.29) and consultants (M = 5.13, SD = 0.98); $t(70.84) = -2.87$, $p = 0.01$. The results from this test also indicated that there were no significant differences in "align stakeholders' interest with organization's vision" between leaders (M = 5.03, SD = 0.93) and consultants (M = 5.41, SD = 0.85), $t(76) = -1.91$, $p = 0.06$; "communicate the organization's current situation" leaders (M= 4.56, SD= 1.19) and consultants (M = 4.41, SD = 1.29), $t(76) = 0.55$, $p = 0.56$; "communicate the organization's desired results" leaders (M = 4.59, SD = 1.05) and consultants (M = 4.87, SD = 1.24), $t(76) = -1.09$, $p = 0.28$; "explain how the change will benefit the organization and

employees", leaders (M = 5.18, SD = 0.91) and consultants (M = 5.28, SD = 1.12), $t(76) = -0.44$, $p = 0.66$; or "prioritize gaps before making decisions", leaders (M = 4.90, SD = 0.81) and consultants (M = 4.97, SD = 0.84), $t(77) = -4.00$, $p = 0.69$ (See Table 5).

Table 5

T-test Result between Professional roles and Needs Assessment Common Processes

	Professionals								
	Leaders			Consultants					
Common Processes	*M*	*SD*	*n*	*M*	*SD*	*n*	*df*	*t*	*p*
Obtain stakeholders buy-in before initiating any changes	4.62	1.09	39	5.15	1.01	39	76	-2.26	0.03
Explain how ignoring the change will cost the organization and employees	4.38	1.29	39	5.13	0.98	39	70.84	-2.87	0.01
Align stakeholders' interest with organization's vision	5.03	0.93	39	5.41	0.85	39	76	-1.91	0.06
Communicate the organization's current situation	4.56	1.19	39	4.41	1.29	39	76	0.55	0.56
Communicate the organization's desired results	4.59	1.05	39	4.87	1.24	39	76	-1.09	0.28
Explain how the change will benefit the organization and employees	5.18	0.91	39	5.28	1.12	39	76	-0.44	0.66
Prioritize gaps before making decisions	4.90	0.81	40	4.97	0.84	39	77	-4.00	0.69

Strategic level

Data and statistics. An Independent-samples *t*-test was performed to examine potential differences between leaders and consultants in implementing NA at the strategic level. The Levene's test for homogeneity of variances was met in the present analysis, $F(1,78) = 3.453$, $p =$

0.07. The test revealed that there were no significant differences in the strategic level and leaders (M = 4.77, SD = 0.75) or consultants (M = 5.05, SD = 0.57); $t(78) = -1.77$, $p = 0.08$ (See Table 6).

Tactical level

Data and statistics. An independent-samples *t*-test was performed to examine potential differences between leaders and consultants in implementing NA at the tactical level. The Levene's test for homogeneity of variances was met in the present analysis, $F(1,78) = 0.62$, $p = 0.43$. The test revealed that there were no significant differences in the tactical level and leaders (M = 4.67, SD = 0.67) or consultants (M = 4.90, SD = 0.64); $t(78) = -1.55$, $p = 0.12$ (See Table 6).

Operational level

Data and statistics. An independent-samples *t*-test was performed to examine potential differences between leaders and consultants in implementing NA at the operational level. The Levene's test for homogeneity of variances was met in the present analysis, $F(1,76)$ 0.05, $p = 0.82$. The test revealed that there were significant differences in the operational level and leaders (M = 4.85, SD = 0.52) or consultants (M = 5.27, SD = 0.47), $t(76) = -3.67$, $p = 0.01$ (See Table 6).

Table 6

T-test Result between Professional roles and Organizational Levels

	Professionals								
	Leaders			Consultants					
	M	*SD*	*n*	*M*	*SD*	*n*	*t*	*df*	*p*
Strategic level	4.77	0.75	41	5.05	0.57	39	-1.77	78	0.08
Tactical level	4.67	0.67	41	4.90	0.64	39	-1.55	78	0.12
Operational level	4.85	0.52	39	5.27	0.47	39	-3.67	76	0.01

Question 3: What, if any, are the differences in the frequency of needs assessment usage between professionals with different levels of change management experience and education?

Two two-way factorial ANOVAs were conducted to examine potential differences in implementation of NA essential processes according to level of education and CM experience among leaders and consultants, respectively.

Leaders

A two-way factorial ANOVA was conducted to examine use of NA essential processes based on leaders' education level and CM experience. There was no significant main effect for education level, $F(2, 79) = 1.98$, $p = 0.15$, nor was there a significant main effect for CM experience, $F(2, 79) = 0.55$, $p = 0.58$. There was also no significant interaction between education level and CM experience, $F(4, 79) = 0.23$, $p = 0.92$ (See Table 7).

Table 7

Two-way factorial ANOVA Result for Leaders Usage of NA and Their Level of Education and CM Experience

Leaders	*M*	*SD*	*n*
Bachelor /Professional	4.80	0.63	26
0-4 years	4.73	0.89	9
5-10 years	4.88	0.72	3
+ 10 years	4.82	0.44	14
Master	4.54	0.61	46
0-4 years	4.44	0.79	11
5-10 years	4.17	0.35	3
+ 10 years	4.61	0.56	32
Doctorate/Specialist	4.80	0.71	16
0-4 years	4.56	0.62	3
5-10 years	4.77	0.40	2
+ 10 years	4.86	0.80	11
CM Experience	4.67	0.64	88
0-4 years	4.58	0.78	23
5-10 years	4.59	0.57	8
+ 10 years	4.71	0.59	57

Source	*SS*	*MS*	*F*	*df*	*p*	Partial η^2

Education	1.69	0.84	1.98	2	0.15	0.04
Experience	0.47	0.24	0.58	2	0.58	0.01
Experience*Education	0.40	0.10	0.23	4	0.91	0.01

Consultants

A two-way factorial ANOVA was conducted to examine the use of NA essential processes among consultants according to education level and CM experience. A significant main effect for education level was detected, $F(2, 79) = 5.72$, $p = 0.01$. However, a post hoc Tukey HSD test revealed that there were no significant differences between any specific levels of education: bachelor/professional ($M = 5.02$, $SD = 0.37$), master degree ($M = 4.81$, $SD = 0.64$), or doctorate/specialist degrees, $M = 5.09$, $SD = 0.58$, $p > 0.05$.

A significant main effect for CM experience was also detected, $F(2, 79) = 5.09$, $p = 0.01$. A post hoc Tukey HSD test revealed that there were significant differences according to consultants' CM experience. Consultants with ten years of experience or more ($M = 5.00$, $SD = 0.52$) reported using NA essential processes significantly more often than consultants who had 0 to 4 years of experience ($M = 4.59$, $SD = 0.72$; $p < 0.05$). There was no significant interaction between education level and CM experience among consultants, $F(2, 66) = 2.20$, $p = 0.12$ (See Table 8).

Table 8

Two-way Factorial ANOVA Result for Consultants Usage of NA Essential Processes and Their Level of Education and CM Experience

Consultants	*M*	*SD*	*n*
Bachelor /Professional	5.02	0.37	18
0-4 years	4.87	0.25	6
5-10 years	x	x	x
+ 10 years	5.03	0.37	12
Master	4.81	0.64	41
0-4 years	4.06	0.67	6
5-10 years	5.13	0.39	4

+ 10 years	4.92	0.57	31
Doctorate/Specialist	5.09	0.83	14
0-4 years	4.98	0.90	4
5-10 years	x	x	x
+ 10 years	5.14	0.46	10
CM Experience	4.92	0.58	73
0-4 years	4.59	0.72	16
5-10 years	5.13	0.39	4
+ 10 years	5.00	0.52	53

Source	*SS*	*MS*	*F*	*df*	*p*	Partial η^2
Education	3.28	1.64	5.72	2	0.01	0.15
Experience	2.29	1.46	5.09	2	0.01	0.13
Experience*Education	1.26	0.63	2.20	2	0.12	0.06

Question 4: What, if any, are the differences in the frequency of needs assessment usage between professionals with different levels of needs assessment experience and education?

Two two-way factorial ANOVAs were conducted to examine potential differences in using NA essential processes according to their level of education and prior NA experience, for leaders and consultants, respectively.

Leaders

A two-way ANOVA was conducted to examine the use of NA essential processes according to the subjects' education level and prior NA experience. There were no statistically significant differences in use of NA essential processes according to education level among leaders, $F(2, 79) = 1.01$, $p = 0.34$. There were also no significant differences in use of essential NA processes according to prior NA experience, $F(2, 79) = 1.84$, $p = 0.17$, and no statistically significant interaction between education level and NA experience, $F(4, 79) = 0.12$, $p = 0.97$ (See Table 9).

Table 9

Two-way Factorial ANOVA Result for Leaders Usage of NA Essential Processes and Their Level of Education and NA Experience

Leaders	*M*	*SD*	*n*
Bachelor /Professional	4.80	0.63	26

0-4 years	4.76	0.67	13
5-10 years	4.50	x	1
+ 10 years	4.86	0.63	12
Master	4.54	0.62	46
0-4 years	4.50	0.68	16
5-10 years	4.04	0.05	2
+ 10 years	4.60	0.59	28
Doctorate/Specialist	4.80	0.71	16
0-4 years	4.69	0.51	5
5-10 years	4.36	0.95	3
+ 10 years	5.06	0.72	8
CM Experience	4.67	0.64	88
0-4 years	4.63	0.65	34
5-10 years	4.27	0.63	6
+ 10 years	4.74	0.63	48

Source	*SS*	*MS*	*F*	*df*	*p*	Partial η^2
Education	0.91	0.45	1.10	2	0.34	0.03
Experience	1.52	0.76	1.84	2	0.17	0.04
Experience*Education	0.20	0.05	0.12	4	0.97	0.01

Consultants

A two-way ANOVA was conducted that examined the use of NA essential processes based on consultants' education level and CM experience. No significant main effect for education level was detected, $F(2, 65) = 2.91$, $p = 0.06$, nor was a significant main effect according to prior CM experience detected, $F(2, 65) = 1.45$, $p = 0.24$. No significant interaction between education level and prior NA experience was detected, $F(3, 65) = 1.23$, $p = 0.30$ (See Table 10).

Table 10

Two-way Factorial ANOVA Result for Consultants Usage of NA Essential Processes and Their Level of Education and NA Experience

Consultants	*M*	*SD*	*n*
Bachelor /Professional	5.03	0.37	18
0-4 years	4.90	0.24	7
5-10 years	5.25	0.35	2
+ 10 years	5.08	0.46	9
Master	4.81	0.64	41
0-4 years	4.32	0.89	8

5-10 years	5.03	0.36	5
+ 10 years	4.92	0.55	28
Doctorate/Specialist	5.09	0.58	14
0-4 years	5.24	0.87	3
5-10 years	x	x	x
+ 10 years	5.05	0.53	11
CM Experience	4.92	0.58	73
0-4 years	4.70	0.75	18
5-10 years	5.09	0.34	7
+ 10 years	4.98	0.52	48

Source	*SS*	*MS*	*F*	*df*	*p*	Partial η^2
Education	1.84	0.92	2.91	2	0.06	0.08
Experience	0.92	0.46	1.45	2	0.24	0.04
Experience*Education	1.17	0.39	1.23	3	0.30	0.05

Question 5: What, if any, are the differences in the frequency of needs assessment usage across the organizational level between professionals in different sectors?

Four one-way multivariate analyses of variance (MANOVA) were conducted to examine potential differences in use of NA processes within different organizational levels (strategic, tactical, and operational level) in across various industries (government/non-profit, education, healthcare, financial institution, manufacturing, and training and development). The first two MANOVAs tested differences in reported use of NA common processes, and the second two MANOVAs tested differences in reported use of strategic, tactical, and operation tasks. Leaders and consultants were tested separately.

Common processes

Leaders. A one-way multivariate analysis of variance (MANOVA) was conducted to test leaders' (those who make decision regarding change) usage of NA common processes across different industries. Box's *M* (198.35) was significant, *p* (0.01) < α (0.05). A statistically significant main effect was obtained, Pillai's Trace = 0.62, $F(35, 39) = 1.59$, $p = 0.02$, partial $\eta 2 = 0.13$. There were significant differences between different industries in how often consultants would "obtain stakeholders buy-in before initiating any changes" $F(5, 80) = 2.47$; $p = 0.04$; partial

η^2 = 0.13. A post hoc Tukey HSD test revealed that leaders in government/non-profit reported significantly lower rates of this processes (*M* = 3.95, *SD* = 0.76) than leaders in manufacturing (*M* = 5.05, *SD* = 1.21). In addition, a post hoc Tukey HSD test showed that there was a statistically significant difference in how often leaders would "communicate the organization's current situation". Leaders in financial institutions reported lower rates (M = 2.33, SD = 0.58; $p < .05$) than leaders in healthcare (M = 4.75, SD = 1.42; $p < .05$), manufacturing (M = 4.50, SD = 1.19; $p \leq .05$), and training and development (M = 4.60, SD = 1.27; $p < .05$). There were no significant differences between leaders in different industries $p > 0.05$ based on the following NA common processes: "explain how ignoring the change will cost the organization and employees"; "align stakeholders' interest with organization's vision"; "communicate the organization's desired results"; "explain how the change will benefit the organization and employees"; "explain how the change will benefit the organization and employees"; or "prioritize gaps before making decisions" (See Table 11).

Table 11

MANOVA – Different in NA Common Process Usage by Leaders in Different Industries

Variable **Leaders**	*F*	*df1*	*df2*	*p*	Partial η^2
Obtain stakeholders buy-in before initiating any changes	2.47	5	80	0.04	0.13
Explain how ignoring the change will cost the organization and employees	0.73	5	80	0.60	0.04
Align stakeholders' interest with organization's vision	0.70	5	80	0.62	0.04
Communicate the organization's current situation	2.29	5	80	0.05	0.13
Communicate the organization's desired results	1.04	5	80	0.40	0.06

Explain how the change will benefit the organization and employees	1.93	5	80	0.10	0.11
Prioritize gaps before making decisions	2.05	5	80	0.08	0.11

Consultants. A one-way multivariate analysis of variance (MANOVA) was conducted to examine potential differences in how often consultants (those who recommend and/or facilitate decisions regarding change and implementation) reported using NA common processes when comparing across different industries. A Box's *M* (196.62) was significant, *p* (0.01) < α (0.05). A statistically significant MANOVA effect was obtained, Pillais' Trace = 0.74, $F(35, 32) = 1.56$, $p = 0.03$, partial $\eta 2 = 0.15$. There were significant differences between different industries when considering "align stakeholders' interest with organization's vision" $F(5, 65) = 3.34$; $p = 0.01$; partial $\eta^2 = 0.20$). A post hoc Tukey HSD test revealed that consultants in financial institutions performed this task (*M* = 3.00, *SD* = 1.41) significantly less often than consultants in government/non-profit (*M* = 5.36, *SD* = 0.63); healthcare (*M* = 5.18, *SD* = 1.17); manufacturing (*M* = 5.60, *SD* = 0.52); and training and development (*M* = 5.27, *SD* = 0.94) settings. There were also significant differences between different industries when considering "explain how ignoring the change will cost the organization and employees", $F(5, 65) = 3.17$; $p = 0.01$; partial $\eta^2 = 0.20$. A post hoc Tukey HSD test showed that consultants in financial institutions reported performing this task (*M* = 2.50, *SD* = 0.71) significantly less often than consultants in government/non-profit (*M* = 5.14, *SD* = 1.03); healthcare (*M* = 5.45, *SD* = 0.52); manufacturing (*M* = 4.90, *SD* = 0.74); and training and development (*M* = 5.03, *SD* = 1.16). There were no significant differences between industries in reporting the following NA common processes among consultants: "obtain stakeholders buy-in before initiating any changes"; "communicate the organization's desired results"; "explain how the change will benefit the organization and employees"; "explain how the

change will benefit the organization and employees"; or "prioritize gaps before making decisions" (See Table 12).

Table 12

MANOVA – Different in NA Common Process Usage by Consultants in Different Industries

Variable

Consultants	*F*	*df1*	*df2*	*P*	Partial η^2
Obtain stakeholders buy-in before initiating any changes	0.98	5	65	0.43	0.07
Explain how ignoring the change will cost the organization and employees	3.17	5	65	0.01	0.20
Align stakeholders' interest with organization's vision	3.34	5	65	0.01	0.20
Communicate the organization's current situation	1.32	5	65	0.27	0.09
Communicate the organization's desired results	1.66	5	65	0.16	0.11
Explain how the change will benefit the organization and employees	2.14	5	65	0.07	0.14
Prioritize gaps before making decisions	2.21	5	65	0.06	0.16

Organizational levels

Leaders. A one-way multivariate analysis of variance (MANOVA) was performed to examine potential differences between industry settings in how often leaders' (who make decision regarding change) report performing NA strategic, tactical, and operational procedures. A Box's *M* (18.42) was significant, *p* (0.87) > α (0.05). A statistically significant MANOVA effect was not obtained, Wilks' Lambda = 0.82, $F(15, 22) = 1.04$, $p = 0.41$, partial $\eta^2 = 0.06$. There were no significant differences between different industries among leaders in how often they reported using NA strategic level processes, ($F(5, 80) = 0.35$; $p = 0.88$; partial $\eta^2 = 0.02$); tactical level, ($F(5, 80)$

= 1.31; p = 0.27; partial η^2 = 0.08); or operational level, (F(5, 80) = 0.73; p = 0.60; partial η^2 = 0.04) (See Table 13).

Table 13

MANOVA – Different in NA Usage by Leaders in Different Industries

Variable **Leaders**	*F*	*df1*	*df2*	*P*	Partial η^2
Strategic level	0.35	5	80	0.88	0.02
Tactical level	1.31	5	80	0.27	0.08
Operational level	0.73	5	80	0.60	0.04

Consultants. A one-way multivariate analysis of variance (MANOVA) was conducted to examine differences within in strategic, tactical, and operational-level tasks among consultants (those who recommend or facilitate decisions regarding change and implementation), comparing across different industries. Box's M (45.44) was significant ($p < 0.05$). A statistically significant main effect was detected, Wilks' Lambda = 0.65, F(15, 174.32) = 1.94, p = 0.02, partial $\eta 2$ = 0.13. There were significant differences between industries at the operational level, F(5, 65) = 2.92; p = 0.02; partial $\eta 2$ = 0.18. A post hoc Tukey HSD test revealed that consultants in financial institutions (M = 3.78, SD = 0.00) reported significantly lower implementation of operational NA processes than government/non-profit (M = 5.17, SD = 0.50; $p < 0.05$); healthcare (M = 5.06, SD = 0.68; $p < 0.05$); manufacturing (M = 5.27, SD = 0.51; $p < 0.05$); and training and development (M = 5.24, SD = 0.51; $p < 0.05$). There were no significant differences between industries among consultants at the strategic level, F(5, 65) = 1.39; p = 0.24; partial $\eta 2$ = 0.10, or tactical level, F(5, 80) = 0.55; p = 0.74; partial $\eta 2$ = 0.04 (See Table 14).

Table 14

MANOVA – Different in NA Usage across Organizational Level by Consultants in Different Industries

Variable **Consultants**	*F*	*df1*	*df2*	*p*	Partial η^2
Strategic level	1.39	5	65	0.24	0.10
Tactical level	0.55	5	65	0.74	0.04
Operational level	2.92	5	65	0.02	0.18

Summary

This chapter presented statistical results for the current study. Explanation of demographic data, data analysis, survey methods, and data cleaning procedures were provided. Data analysis methods including, independent-samples *t*-tests, two-way ANOVA, one-way MANOVA, and simple linear regression were used. The following chapter discusses the study's findings, limitations, and futures directions.

CHAPTER 5: DISCUSSION

The purpose of this study was to: 1) examine the extent to which professionals are familiar with needs assessment (NA); 2) examine the relationship between NA familiarity and utilization; 3) discover the extent to which organizational professionals utilize NA as precursor to change management (CM) across organizational levels; and 4) to assess the influence of level of education, years of experience, and industry type in using NA as part of their CM process.

Findings of the Study

Question 1: To what extent are organizational professionals familiar and utilize needs assessment as a precursor to the change initiative?

The study findings suggest that consultants are more familiar with NA terms and processes than leaders. However, consultants had different approaches and understanding regarding how to collect their data in order to justify their recommendations regarding CM. Even though the majority relied on data to assess the organizations' needs and make decisions regarding the required change, number of consultants relied on group consensus 29% and gut feeling 17% compared to those who used data and statistics 54%. On the other hand, leaders demonstrated less familiarity with NA terms and processes than consultants did. Leaders used data 7% less than consultants did, and they used group consensus 31% and gut feeling 23% compared with leaders who relied on data and statistics approach 47%. These findings are critical to address, as one's CM approach can place an organization, people, and community in unfortunate situations if they lead to ineffective or unsuccessful changes. These findings are consistent with Gigerenzer (2014) when studying decision making in manufacturing, automotive and healthcare industries, and consistent with Quinn (1980, 1990, & 1996) that large number of decision makers used gut feelings and other means as evidence to support their decisions. However, the above studies did not investigate

the use of group consensus, thus, the current study extends the results to group consensus as decisional approach.

The study also found that there were non-significant associations between knowledge and usage of NA in the workplace for both leaders and consultants. The findings suggest that both professionals had a fair amount of knowledge of evidenced based NA approaches. However, the implementation of NA in the workplace was not consistent with their knowledge. This means when both professionals' knowledge of NA increased, their utilization of NA statistical approaches did not significantly increase. These findings are consistent with prior research indicating that organizations that bypass proper NA processes might enact ineffective interventions and training procedures (Chi, Wu, & Lin, 2008).

Question 2: At what organizational level of result are needs assessment focused (strategic, tactical, and operational)?

This study also set out to determine any differences in implementation of NA procedures across different organizational levels among leaders and consultants who used data and statistics as a decision-making approach. The following sections will discuss the findings pertaining to use of common processes across the organizational levels, and then discuss findings related to strategic, tactical, and operational procedures.

Common Processes

As discussed previously, the common processes are items that professionals must consider when conducting NA at each organizational level. The study findings showed that consultants had more interest than leaders in obtaining buy-in from stakeholders before initiating any change initiatives. These findings confirm that advocating a decision and obtaining buy-in from top management are critical for organizational success (Drucker, 2008), and ignoring the buy-in element would cause implementation deficiencies and create drawback of organizational

performance thereafter (Garvin & Roberto, 2005; Davies, 1999; Paradise, Mosley, Worthen, & Timreck, 2009; Guerra-Lopez I. , 2009; Basu, 2015). However, it would be interesting to investigate in future studies why leaders invest less in obtaining buy-in from stakeholders than consultants.

Leaders and consultants exhibited different attitudes regarding how ignoring change would cost the organization and employees. The study findings revealed that consultants were applying this task more than leaders. This finding confirmed an argument proposed in By's (2005) study that most top managers do not have a comprehensive understanding of the consequences of their change initiatives. Managing the change process and related outcomes are challenging. Therefore, these findings are also aligned with the recommendation proposed by Griffith (2001) that emphasized consultants play a critical role in determining the cost and consequences for CM, which may better facilitate the decision making process and create buy-in from top managers. However, the current findings are not consistent with Blenko, Mankins, and Rogers (2010); Guerra-Lopez and Blake (2011); or Nutt (2008), that leaders determined cost and consequences based on data, and understanding the potential impact of change on the business's and their financial performance. The difference between the previous studies and the current one is that previous studies used qualitative methods that only sampled leaders and only focused on decision-making process and strategies. This study also examined consultants, since they play an important part of the decision-making process in CM.

The study findings suggest that there is a 94% chance that leaders and consultants were different in aligning stakeholders' interest with organization's vision, but do not yet have significant difference in applying this procedure. These findings are not consistent with (Watson, 2013) of the positive outcomes when organizations had aligned and communicated a clear vision

with stakeholders' objectives and expectations. However, there are no indictors of how leaders and consultants were different regarding this matter. This could due to sampling size.

Some non-significant results were found in the current study. The findings regarding applying "communicate the organization's current situation", "communicate the organization's desired results", "explain how the change will benefit the organization and employees", and "prioritize gaps before making decisions" showed no significant difference between leaders and consultants. The current study lacks sufficient evidence to support prior research findings (Guerra-Lopez & Blake, 2011; Nutt, 2008; Hung & Altschuld, 2013) who found the above procedures were considered by organizational leaders during new interventions. The difference between the previous studies and the current one is that this study relied primarily on quantitative closed-ended data collection, where previous studies focused on qualitative measures that only sampled organizational leaders.

Strategic level

Findings at the strategic level examined only respondents who used data and analysis as the main instrument for change and decision-making. This study found no significant difference between leaders and consultants in applying NA at the strategic level. However, there is a 93% chance that leaders and consultants differed in utilizing NA at the strategic level, but do not yet have significant difference in applying the strategic NA procedures at this level. Serval studies (Aiken & Keller, 2009) emphasized financial advantages when companies paid closer attention to societal values. In addition, ATD (2014) stressed in their study that 70% of failed change initiatives may have resulted from inefficient implementation and alignment in strategic operations within internal and external organizational environments (Kotter, 2008; Watson, 2013). Kaufman (2005) argued that organizations wait for the problems to occur and then struggle to react. Adopting the

reactive rather than proactive approach puts organizations in a critical situation that can lead decision makers to take fast and ineffective decisions in response to sudden and unexpected problems.

Tactical level

Findings at the tactical level examined only respondents who used data analysis as the main instrument for change and decision-making. The study findings showed no significant difference between leaders and consultants in applying NA at the tactical level. The current study is consistent with others (Nutt, 1984; Baer, Dirks, & Nickerson, 2013; Bauer, Schmitt, Morwitz, & Winer, 2013) that organizations lacked an effective tactical approach to achieve their objectives. The difference between the previous studies and the current one is that previous studies did not focus primarily on NA and CM; rather they only focused on decision-making approaches. In addition, this study used quantitative closed-ended questionnaire comparing leaders and consultants, which could impact the sampling size, where previous studies focused on qualitative measure based on only organizational leaders.

Operational level

Findings at the operational level examined only respondents who used data analysis as the main instrument for change and decision-making. The current study suggests that consultants were utilizing NA at the operational level more than leaders. These findings are aligned with prior research (Anvari, Amin, & Seliman, 2010; Chang et al., 2012; Hutchins, 2009; Peterson & Nielson, 2009; Beer, Eisenstat, & Spector, 2011; ATD, 2014) that support the importance of NA at operational level to ensure alignment of employees' needs and their productivities. In addition, these findings address the critical role of professionals in decisions regarding human capital investment decisions and how they can positively enhance the operational level (Bapna et al.,

2013). The operational level results is considered the building blocks for the organization's success. Once these results are achieved, the organizations will be able to work effectively at the tactical and strategic level (Kaufman & Guerra-Lopez, 2013). Three major differences between the previous studies and the current one are that the sample size was relatively small, subjects were distributed over multiple industries, and subjects were also split between two professional roles (Anvari, Amin, & Seliman, 2010; Chang et al., 2012; Hutchins, 2009; Peterson & Nielson, 2009; Beer, Eisenstat, & Spector, 2011; ATD, 2014; Bapna et al., 2013).

It is important to mention that previous studies did not examine NA as a process for CM across the organizational levels. Rather, they looked at specific procedures and strategies that are part of NA. Therefore, these findings provide a new contribution to the literature regarding the utilization of NA across the organizational levels prior CM. Leaders and consultants had focused differently in each organizational level. Both leaders and consultants focused more at the operational level than strategic and tactical levels, despite the different rate in utilizing NA at the operational level. In addition, it was interesting to find out that the tactical level was overall the area of least focus. Focusing at the operational level more than other levels could lead to misalignment of what organizations wish to accomplish, how to get there, and how to achieve their desired outcome. There was a difference between leaders and consultants in performing the common processes of aligning stakeholder visions with the expected outcomes, as well as securing stakeholder buy-in. These steps are vital to be confirmed and obtained at the strategic level before they are communicated and implemented at the tactical and operational level. However, given the fact that most of respondents operated within training and development industries (31.71%), they would be more focused at the operational level than at the strategic and tactical levels. The operational level is considered the building block of all other organization levels. Organizations

must have both a clear direction at the strategic level and an effective plan at the tactical level in order to execute their change initiatives.

Question 3: What, if any, are the differences in the frequency of needs assessment usage between professionals with different levels of change management experience and education?

This study also set out to determine the difference between leaders and consultants in using the essential processes of NA based on their level of education and CM experience. The following discussions will start with the findings from leaders then consultants in using the essential NA processes based on the data and statistics approaches.

Leaders

The study findings suggest that level of education and years of CM experience did not influence utilization of essential NA processes among leaders. This finding did not align with Williams (2015); nor with Siegal, Church, Javitch, Waclawski, and Burd (1996). Five major differences between previous studies and the current one include the following: previous studies had relatively large number of respondents, covered fewer industries, focused on managers only, did not cover all the essential process of NA, and did not include level of education and years of experience as a factor.

Consultants

The study findings suggest level of education may influence consultants' use of essential NA processes. However, the post hoc analysis did not indicate where the significant difference within groups existed. These findings are consistent with Williams (2015) and Siegal et al., (1996). The current study findings did not focus only on managers, like previous studies. Therefore, these findings can count as a new contribution to the field. This study's findings also suggest a relationship between consultants' CM experience and their use of the essential NA processes.

Consultants with ten years or more of experience tended to use essential NA processes more than consultants who had less experience. These findings are consistent with Siegal et al., (1996). However, the current study did not find any interaction between consultants' education level and years of CM experience on use of essential NA processes. As mentioned before, several major difference between the previous studies and the current one are that previous studies had relatively large number of respondents, covered fewer industries, focused on managers only, and did not cover all the essential process of NA.

Question 4: What, if any, are the differences in the frequency of needs assessment usage between professionals with different levels of needs assessment experience and education?

Similar to the previous research question, this study examined the difference between leaders and consultants in using essential processes of NA based on their level of education and NA experience. The following sections discuss findings from leaders and consultants in using the essential NA processes.

Leaders and consultants

The findings suggest that education and experience played no major role in implementing the NA essential processes among leaders or consultants. The empirical literature on relationship between professionals' usage of NA with their education level and NA experience is scarce. However, Toker and Moseley (2013) examined the mental model of several concepts on professionals in the field of performance improvement, and one of these concepts was NA. Therefore, generalization cannot be assumed in this case. This could due to unequal sampling between groups.

Question 5: What, if any, are the differences in the frequency of needs assessment usage across the organizational levels between professionals in different sectors?

This study also set out to examine the difference between leaders and consultants, who used statistical approaches to make NA-related decisions across various organizational levels. The following sections address findings regarding common processes across the organizational levels, and then address procedures at the strategic level, tactical level, and operational level.

Common processes

Leaders. The study findings show that leaders in the manufacturing industry differed significantly from government/non-profit industry in how often they obtained stakeholders' buy-in before initiating change. Leaders in government/non-profit seemed less focused on obtaining stakeholders' buy-in before initiating any changes than in manufacturing industry. In addition, findings revealed that leaders in financial institutions would less frequently engage in communicating the organization's current situation than leaders in healthcare, manufacturing, and training and development industry. Finally, there were no significant differences between leaders in different industries in applying the rest of the NA common processes. These findings are consistent with Siegal et al., (1996) even though they focused only on CM processes, so the current study also acts to extend previous findings to the needs assessment process as well. Little is known in the literature about the utilization of NA across the organizational levels. However, a number of studies have focused on *training* needs assessment (TNA) (Anvari et al., 2010; Ferdous & Razzak, 2012). Thus, the current findings could be considered a new contribution to the literature.

Consultants. The findings indicate that consultants in financial institutions were less focused on aligning stakeholders' interest with organization's vision than consultants in government/non-profit, healthcare, manufacturing, and training and development industries. Moreover, the findings showed that consultants in financial institutions differed significantly from

government/non-profit, healthcare, manufacturing, and training and development industry in how often they would explain how ignoring the change would cost the organization and employees. Finally, there were no significant differences between consultants in different industries in applying the rest of the NA common processes. These findings are consistent with (Siegal et al.,1996) even though they focused only on CM processes, so the current study also acts to extend previous findings to the needs assessment process as well. Finally, there were no significant differences between leaders in different industries in applying the rest of the NA common processes. Little is known in the literature about the utilization of NA across the organizational level. However, a number of studies (Anvari et al., 2010; Ferdous & Razzak, 2012) focused only on TNA. These findings can be considered a new contribution to the literature.

Organizational levels

The findings reveal that leaders did not significantly differ in applying strategic, tactical, or operational NA techniques across different industries. However, the study findings indicated that consultants in financial institutions would utilize NA processes at the operational level significantly less than consultants in government/non-profit, healthcare, manufacturing, and training and development industries. Finally, the findings showed no significant differences in the use of strategic or tactical NA processes across industries. These findings are consistent with (Siegal et al.,1996) even though they focused only on CM processes, so the current study also acts to extend previous findings to needs assessment process as well. Little is known in the literature about the utilization of NA processes across the organizational levels in different industries. However, a number of prior studies (Anvari et al., 2010; Ferdous & Razzak, 2012) focused only on TNA. Thus, the current findings could be considered a new contribution to the literature.

Implications

The findings of the current study suggest that many professionals should reassess their change management approaches. An immediate action that leaders and consultants could take would be to reconsider their data collection approaches. Change is almost impossible to successfully implement without acknowledging organizational and human needs. It is also too risky to identify organizational needs based on gut feelings or group consensus without utilizing reliable data. It is also vital for professionals to reevaluate their knowledge of NA procedures, and to apply their knowledge and skills to their own change management projects. Given the large number of change management models and their complexity, organizations should incorporate NA as a process for change management. This way, organizations will be able to identify the current situation, the expected result, and detect the gaps as well as prioritizing their options based on costs and benefits. Professionals, especially leaders, should seek to obtain buy-in from stakeholders so they may be more involved in the process and support the change initiatives. Since it is almost impossible to accurately predict the future, professionals are not able to entirely control the outcomes of change. Thus, leaders are urged to further assess the cost and consequences of the change initiatives before they make decisions and move forward. Taking a proactive approach to assess and evaluate the intended outcomes is more effective than reacting problems after they occur.

An additional implication of the study's findings is that professionals may want to pay closer attention to the societal value of change. Professionals should also view the organization from systems perspective to increase the success of the change by aligning stakeholders' expectations with all organizational levels. In addition, findings suggested that leaders did not consider the operational level of NA as much as consultants did. The operational level is

considered the building block of organizational and human performance. Organizations should regularly assess their employees' responsibilities and effectiveness, as well as their existing knowledge and skills to perform their tasks effectively and efficiently.

The findings also suggest that education and experience could influence consultants' NA utilization. Therefore, consultants, learning institutions, and human resource departments may use these findings to improve training and skill development of NA procedures. The implication of the findings demonstrate that NA utilization is different based on industry type. More specifically, the financial industry was less familiar of NA procedures, and rarely implemented them. This finding may guide and benefit business schools and financial institutions to educate and train individuals about NA procedures and techniques in order to enhance decision-making process regarding change management.

Finally, this study adds further implications for organizations to better initiate, develop, and manage organizational change. As mentioned in previous chapters, most change initiatives end in failure. The current study identified critical procedures that professionals were less focused on or neglected during the change management process. These underutilized procedures likely contribute to why change management sometimes fails.

Limitations and Recommendation

This sections presents limitations of the current study while also suggesting avenues for future research. First and foremost, the current study relied primarily on survey data based on closed-ended questionnaires to gather information. Given the fact that this study had several categories analyzed based on multiple factors, unequal size between categories were deducted during the analyses. This can be a result of the low response rate (35.53%), which may have introduced response bias.

Another limitation was that during the data collection process, the recruitment process encountered rejections from associations in the field of CM, strategic management, risk management, project management, and financial management to take part in this study. Their reasons that this study is not part of their field, indicate their unfamiliarity of the NA terms and processes. Therefore, most participants were from training and performance improvement industries. As a result, the findings might not be generalized or speak to the financial field, strategic planning, project or/and risk management fields regarding their relative familiarity of NA terms and processes.

Despite these limitations, the current study is the first to examine NA as process for CM. It also examined differences between leaders and consultants to explore their decision-making approaches regarding change. In addition, this study examined different industries, years of experience, and level of education across a wide range of locations around the world. It also provides new insight about the application of NA as process for CM in different context and settings based on respondents' approach to collect information to make decision regarding change management.

Future studies based on qualitative methodology could gain deeper insight into professionals' practices of NA within their profession in the business field. In addition, it would be interesting to investigate the success rate of change programs that used NA. Furthermore, change initiative requires support from executives, especially from financial key people, and gain inputs regarding their financial decisions and support for change based on NA procedures. This study is a good starting point in measuring professionals' attitude, approach, familiarity, and usage of NA as a process for CM. Professionals in financial institutions were found to be less comprehensive in using NA than those in other industries. Education, experience, and industry

complexity may provide insight regarding differences in utilizing NA procedures. Future studies should also investigate the quality and quantity of NA-focused curriculum delivered in educational and training environments, especially within the business/finance industry.

Summary

The purpose of this study was to examine the familiarity of needs assessment terms and processes among leaders and consultants within various industries. It also investigated utilization of NA as precursor to CM across the organizational levels, strategic, tactical, and operational, and compared these factors based on level of education and years of experience. This study posed the following conclusions:

1. Consultants were more familiar with NA terms and processes than leaders.
2. Both leaders and consultants relied on data and statistics as a source of information to make decisions regarding change, yet both reported higher rates of gut feeling and group consensus
3. There were no associations between knowledge and usage of NA in the workplace for leaders or consultants.
4. Greater knowledge regarding NA did not lead professionals to increase their application of NA procedures in the workplace.
5. Consultants showed more usage of the NA common processes than leaders.
6. Leaders and consultants showed no difference in utilizing NA at the strategic and tactical levels.
7. Consultants based NA decisions on data at the operational level more than leaders did.

8. Level of education and years of CM experience had no effect on leaders' application of NA essential processes. However, consultants' level of education as well as years of CM experience had an impact on their utilization of NA essential processes.
9. Both leaders and consultants showed no difference in utilizing NA essential processes based on their level of education and years of the NA experience.
10. Both professionals showed significant differences in using NA common processes in difference industries.
11. Leader showed no significant differences in using NA procedures at strategic, tactical, or operational levels across all industries.
12. Consultant showed no significant differences in using NA procedures at strategic and tactical levels across industries. However, consultants indicated that they performed NA procedures differently at the operational level in different industries.

APPENDIX A - EMAIL REQUEST

My name is Abdulaziz (Aziz) Alshgeri and I am an international PhD candidate at Wayne State University (WSU), Detroit, MI, and a current member of your organization. I hold an MBA degree from WSU and currently I am pursuing my doctoral study in Instructional Technology focusing on human performance improvement. Given my background in management, I am doing my dissertation on the utilization of needs assessment before and during the change management initiative. My advisor is Dr. Guerra Lopez, an associate professor and director, Institute for Learning and Performance Improvement at WSU – College of Education.

I would greatly appreciate it if you kindly support my research by distributing my survey to your members/non-members list to complete a brief questionnaire. It inquires about how needs assessment is applied and to what extent leaders utilize it in the change management process. I expect that it should take approximately 15-20 minutes for your members to complete. The survey will target three groups: 1) Working in either a cooperate leadership position (CEO, CFO, COO, CMO, etc.) or/and high management level who has the authority to assess, analyze, implement and make decision regarding change initiatives; 2) Business owners who make all the decisions regarding change strategies and implementation; and/or 3) Change agents who are directly working with leaders and involved in the decision-making process regarding change. There are no known or anticipated risks from participating in this study.

As an appreciation for the participants' time, there will be a prize drawing. This prize will be optional for individuals to enter a random drawing to receive one of four prizes ($200, $150, $100, and $50) VISA gift cards.

All information that will be provided will remain confidential and anonymous. I believe that the results from this study will provide valuable outcomes in the business industry and enhance different models and strategies that have been used to improve and facilitate the organizational change/transformation process.

I really hope that you have an avenue that will be accessible to my study to support the research in the field. Once I received your approval and obtained some of your organization's membership information such as number of members, job titles and others, I will send you an invitation letter where you will incorporate it in your email data base list. The survey will start January 2016 until February 2016.

Please feel free to contact me if you have any question or concerns,

Aziz Alshgeri
(419) 320-5658

APPENDIX B – SURVEY INSTRUMENT

The first question will be asked to determine the person eligibility to participate in the survey. If a participant choses "None of the above", he/she will not be able to enter the survey.

- **Please select one of the following that best describes your primary job role?**
  - ☐ Leader
    - CEO
    - VP
    - Manager
    - Supervisor
    - Other (please specify): _____
  - ☐ Business owner
  - ☐ Change agent (change facilitator)
  - ☐ Consultant (Role includes making recommendations regarding organizational change)
  - ☐ None of the above *(Thank you for your interest in participating in the survey. I am sorry that you are not eligible to take the survey, I truly appreciate your time)*

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1. **What is your highest level of education?**
   - ☐ Professional certificate
   - ☐ Bachelor's degree
   - ☐ Master's degree
   - ☐ Specialist degree
   - ☐ Doctorate
   - ☐ Other (Please specify): _____

2. **How long have you been in your current position?**
   Year: _____
   Month: _____

3. **How long have you been involved in change management (include whole experience, not just at your current organization)?**
   Year: _____
   Month: _____

4. **How long have you been conducting needs assessment (include whole experience, not just at your current organization)?**
   Year: _____
   Month: _____

5. **About how many change initiatives are you involved with on an annual basis?**
   (Please specify): _____

6. In what location is your business/organization located?

- ☐ United States of America
- ☐ Canada
- ☐ Central America
- ☐ South America
- ☐ Australia
- ☐ Europe
- ☐ Eastern Europe
- ☐ Middle East
- ☐ Asia
- ☐ Africa
- ☐ Other (Please specify):_____

7. Which industry best describes your organization?

- ☐ Government
- ☐ Higher education
- ☐ K-12 (elementary, middle, high school)
- ☐ Healthcare
- ☐ Financial institution
- ☐ Manufacturing
- ☐ Non-profit
- ☐ Other (Pease specify): _____

8. How many employees does your organization have?

- ☐ Less than 50 employees
- ☐ 50 – 100 employees
- ☐ 101 – 500 employees
- ☐ 501 – 1500 employees
- ☐ 1501 or more

Please answer the following questions based **on your current practice and experience** (Not based on what it makes sense and what it should be). It is important to gain information from your own experiences and practices; there is no right or wrong answer.

9. To what extent do you agree with the following statements:

	Strongly agree	Agree	Somewhat agree	Somewhat disagree	Disagree	Strongly disagree
a. I am familiar with the *term* Needs Assessment	O	O	O	O	O	O
b. I am familiar with the Needs Assessment *process*	O	O	O	O	O	O

10. To what extent do you agree with the following statements:

	Strongly agree	Agree	Somewhat agree	Somewhat disagree	Disagree	Strongly disagree
c. I am familiar with the *term* Needs Assessment	O	O	O	O	O	O
d. I am familiar with the Needs Assessment *process*	O	O	O	O	O	O

11. How often do the following reasons drive your organization to initiate change?

	Always	Almost	Often	Sometimes	Rarely	Never
a. Market competition	O	O	O	O	O	O
b. Cost reduction	O	O	O	O	O	O
c. Meeting customer demand	O	O	O	O	O	O
d. Saving money	O	O	O	O	O	O
e. Adding value to your community/society	O	O	O	O	O	O
f. Other (Please specify): _____						

12. How often do you use the following strategies:

	Always	Almost	Often	Sometimes	Rarely	Never
a. I deal immediately with the problem when it occurs	O	O	O	O	O	O
b. I address issues before they become a problem	O	O	O	O	O	O
c. When change is required, I just take action (I do what first comes to mind)	O	O	O	O	O	O
d. When there is a problem, I do nothing and wait until it goes away	O	O	O	O	O	O
e. I use a strategy that worked in the past	O	O	O	O	O	O

13. In selecting the best change initiatives, I rely ***primarily* on: (please select one)**

	Select one
a. My gut feeling	O
b. Group consensus	O
c. Data and statistics	O

14. How often do you use the following strategies as part of your ongoing change management approach?

	Always	Almost	Often	Sometimes	Rarely	Never
a. I use data that are drawn from needs assessment	O	O	O	O	O	O
b. I prioritize gaps before making decisions	O	O	O	O	O	O
c. I do NOT utilize needs assessment because it is costly	O	O	O	O	O	O
d. I skip needs assessment due to lack of needs assessment capabilities (resources, interpretation of findings, etc.)	O	O	O	O	O	O

15. Before starting any change process, I:

	Always	Almost	Often	Sometimes	Rarely	Never
a. Identify the stakeholders (clients, managers, owners, etc.) that could ***influence*** the change process	O	O	O	O	O	O
b. Obtain stakeholders buy-in before initiating any changes	O	O	O	O	O	O
c. Communicate with clients, customers, community members who will/could be ***affected*** by our decisions.	O	O	O	O	O	O
d. Define the organization's objectives/goals	O	O	O	O	O	O
e. Define the agreeable measurable performance related needs	O	O	O	O	O	O

16. During the change process, I align stakeholders' interest with:

	Always	Almost	Often	Sometimes	Rarely	Never
a. The organization's vision	O	O	O	O	O	O
b. The organization's mission	O	O	O	O	O	O
c. The organization's objectives	O	O	O	O	O	O

17. When assessing gaps in performance, I consider:

	Always	Almost	Often	Sometimes	Rarely	Never
a. Employees or group of people perspectives	O	O	O	O	O	O
b. Organizational performance	O	O	O	O	O	O
c. External societal impact (including value added to clients)	O	O	O	O	O	O

18. When working with your organization, you consider the following during the change process:

	Always	Almost	Often	Sometimes	Rarely	Never
a. Vision	O	O	O	O	O	O
b. Mission	O	O	O	O	O	O
c. Operational objectives	O	O	O	O	O	O

19. In regards to your position, to what extent do you perform the following tasks:

	Always	Almost	Often	Sometimes	Rarely	Never
a. I assess knowledge and skills required to implement change.	O	O	O	O	O	O
b. I evaluate the return on investment/value-added on any performance support (training, job aid, etc.) before implementing the change	O	O	O	O	O	O
c. I communicate the purpose of performance support tools with employees before implementing them.	O	O	O	O	O	O
d. I communicate the organization's current situation with all employees.	O	O	O	O	O	O
e. I communicate the organization's *desired results* with all employees across the organizational levels.	O	O	O	O	O	O
f. I communicate the organization's *expectations* with all employees across the organizational levels.	O	O	O	O	O	O
g. I explain how the change will <u>*benefit*</u> the organization and employees.	O	O	O	O	O	O
h. I explain how ignoring the change will <u>*cost*</u> the organization and employees.	O	O	O	O	O	O

i. I communicate the objectives of the change initiatives to all employees.	O	O	O	O	O	O

20. How often do you implement the following to support change initiatives?

	Always	Almost	Often	Sometimes	Rarely	Never
a. Training	O	O	O	O	O	O
b. Job aid	O	O	O	O	O	O
c. Coaching	O	O	O	O	O	O
d. Other (please specify): _____						

21. Based on your previous response, you offer performance support(s) based on:

	Always	Almost	Often	Sometimes	Rarely	Never
a. Training needs assessment	O	O	O	O	O	O
b. Previous training experience	O	O	O	O	O	O
c. Cost restrictions	O	O	O	O	O	O
d. Employees' choices of training	O	O	O	O	O	O

Thank you for your time and support for your participation in this research. As an appreciation for your time, you have an option to participate in a prize drawing to win one of four prizes ($200, $150, $100, or $50) VISA gift cards. Please enter your name and email below to be contacted, you can provide your address if you would like:

(Your information will be confidential and will not be used to track your specific responses)

If you do not wish to enter the prize drawing, please click "Next" to submit the survey.

Name: _____

Email: _____

Address (optional):

Street : _____

City : _____

Zip code : _____

P.O Box : _____

State : _____

APPENDIX C – EXPERTS' LETTER

Dear experts,

My name is Abdulaziz Alshgeri (Aziz), I am an international Ph.D. candidate at Wayne State University, Detroit, MI. My research focuses on performance improvement. My advisor is Dr. Ingrid Guerra Lopez, professor and director of the institute for learning and performance Improvement at Wayne State University – College of Education.

I have contacted you due to your expertise in my area of research, specifically in needs assessment. I am writing to ask if you would kindly review the attached questionnaire and provide me with your feedback.

The purpose of my research is to explore the extent to which needs assessment processes precede change management initiatives. I expect that completing the questionnaire should take approximately 15-20 minutes for the participants to complete.

I am specifically targeting the following individuals:

- Working in either a corporate leadership position (CEO, CFO, COO, and CMO, VP levels) or management level who has the authority to assess, analyze, implement and make decision regarding change management; AND / OR
- Owning a business and makes all the decisions regarding change management strategies and implementation; AND / OR
- Change agents who are directly working with leaders and are involved in the decision-making process regarding change with leaders (such as professionals working in learning & development, performance improvement, organizational development, etc.).

Your input will enable me to assess the validity of my survey and will ensure it measures what it is intended to measure. Please note some questions are asked twice but in different formats and their statements were rearranged to measure reliability based on alternative-form of reliability (questions 20,27 and 18,28) I look forward to receiving your valuable feedback by October 18 if that would be possible.

Please feel free to contact myself or my advisor (email: ingrid.guerra-lopez@wayne.edu) if you have any question.

Thank you for your time and I truly appreciate your support.
Aziz Alshgeri
(419) 320-5658
aziz.alshgeri@gmail.com

APPENDIX D – EXPERTS' INFORMATION

Experts' name	Title	Contact
Roger Kaufman	Professor Emeritus, Florida State University	rkaufman@nettally.com
Ryan Watkins	Associate Professor, Educational Leadership -The George Washington University	rwatkins@gwu.edu
Gary Craig	Management Consulting - Vector Group, Inc.	gcraig@vectorgroupinc.com

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ABSTRACT

NEEDS ASSESSMENT AS A PROCESS FOR CHANGE MANAGEMENT: ALIGNING ORGANIZATIONAL PERFORMANCE AND HUMAN CAPITAL INVESTMENT WITH STRATEGIC PLANNING AND CHANGE CREATION

by

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Research suggests that 70% of change management (CM) initiatives are considered unsuccessful. The most important reason for the dismal success rate of change initiatives is that they are driven by poor and invalid strategic decisions. Frameworks that businesses implement to secure sustainable long-term competitive advantages in the marketplace are often not effective. Therefore, decision-making related to improving results is critical, and must be based on an organization's preset criteria. Creating and prioritizing key performance indicators direct leaders' attention to effective change decisions. Prior research addresses several approaches to decide whether change is needed, such as statistical evidence, gut feelings, or group consensus.

Numerous studies have examined a variety of change management approaches and models, which can create a frustrating work environment that hinders businesses from making the right decisions. Therefore, needs assessment (NA) is an essential process for businesses success. The purpose of this study was to: 1) examine the extent to which professionals are familiar with needs assessment (NA); 2) examine the relationship between NA familiarity and utilization; 3) discover the extent to which organizational professionals utilize NA as precursor to change management

(CM) across organizational levels; and 4) to assess the influence of level of education, years of experience, and industry type in using NA as part of the CM process.

This study utilized a sample of 164 leaders and consultants who plan, implement, facilitate, and/or recommend change management. Participants worked in different industries and locations, and had various educational backgrounds and years of experience in NA and CM. Data were collected using a survey instrument using 6-point Likert scales.

Findings suggest that consultants are more familiar with and more frequently utilize NA procedures than leaders. Both leaders and consultants relied on statistics as a source of information to make decisions regarding change, yet both reported higher rates of gut feeling and group consensus to make decisions regarding change. Consultants' level of education, years of CM experience, and type of industry had an impact on their utilization of NA procedures. This was the first empirical study to examine the use of NA by professionals in implementing CM decisions.

AUTOBIOGRAPHICAL STATEMENT

ABDULAZIZ M. ALSHGERI is from Saudi Arabia, Riyadh. Abdulaziz and wife moved to the United States in 2006 to complete their higher education. Abdulaziz is vice president of finance and a board member at the International Society for Performance Improvement, Michigan chapter. He received his Ph.D. in Administrative and Organizational Studies from Wayne State University, Detroit, Michigan, focusing on organizational and human performance improvement. He earned his Master's degree in Business Administration (MBA), specializing in international business and finance from Wayne State University, Detroit, Michigan. He received his Bachelor's degree in Business Administration with great honors, "Magna Cum Laude", from University of Toledo, Toledo, Ohio. He also received a three-year associate's degree in chemical laboratories from Riyadh College of Technology, Saudi Arabia, Riyadh. He is an active member in different professional associations such as the International Society for Performance Improvement (ISPI) both locally and internationally, The Association for Talent Development (ATD), both locally and internationally, and The Society for Human Resource Management (SHRM), both locally and internationally. He attended several conferences, professional meetings/events, and workshops at these associations. He received a quantity of training certifications in change management, consultant skills, project management, return on investment, and articulate storyline 2 for training and development certificate. His area of interests are decision making processes, strategic planning, return on investment, change management, leadership development, performance improvement, needs assessment, organizational development, training and development, and organizational and product evaluation. He can be reached at aziz.alshgeri@gmail.com.